

RUTGERS

School of Criminal Justice

## Intro to Situational Crime Prevention

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## The Tylenol Poisonings

- In 1982, seven people died in Chicago as a result of taking Tylenol poisoned with cyanide
- Mass murder - nowadays might be called terrorism
- Perpetrators not caught and motivation never discovered
- Caused widespread fear about safety of such products
- Significant losses for makers of Tylenol
- Some copycat offences in US and other countries

## "Tamper-proof" Packaging

- U.S. government quickly introduced "Tamper-proof" regulations for food, drugs and cosmetics
- Two guiding principles:
  - Breaks in seal must be highly visible
  - Should be convenient for consumer (!)
- The packaging has been effective (till now) – and is constantly improved
- Classic case of situational crime prevention (SCP)



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## What is Situational Crime Prevention? (SCP)

1. The science and art of reducing opportunities for crime
2. Not exclusively for police – can be used by any agency with a crime or disorder problem
3. Like POP, it focuses on specific forms of crime or disorder
4. It analyzes the "opportunity structure" that facilitate these crimes:
  - a) the immediate physical and social settings of the crimes, and
  - b) the wider societal arrangements
5. It identifies design and management changes to block the crime opportunities with fewest economic and social costs.
6. The changes increase the difficulty or the risks of crime, make it less rewarding or excusable and reduce temptations or provocations.

## Why is SCP helpful for POP?

1. It is a problem solving approach just like POP
2. It provides a sound basis of criminological theory for opportunity reduction:
  - a) Routine activity theory (Cohen and Felson)
  - b) Crime Pattern theory (Patricia and Paul Brantingham)
  - c) Rational Choice perspective (Clarke and Cornish)
3. Helps in thinking about displacement
4. Supplies many ways to reduce opportunities for crime
5. Provides many evaluated examples of successful opportunity reduction

### SCP: Key assumptions

- Crimes result from the interaction of criminal propensities and crime opportunities
- Offenders always decide to commit crime (bounded rationality)
- Opportunity plays an essential part in every form of crime
  - More opportunities lead to more crime and reduced opportunities lead to less crime
  - Easy opportunities draw people into crime
  - Existence of easy opportunities makes possible a "life of crime"

### Car thefts and parking place (British Crime Survey)

#### Thefts per 100,000 cars per 24 hours:

Garage at home	2
Drive/carport	40
Street outside home	117
Public car park	454

### Helmet legislation and motorbike thefts in Germany

Mayhew, Clarke and Elliott 1989

	Motorbikes	Cars	Bicycles
1980	153,153	64,131	358,865
1981	143,317	71,916	410,223
1982	134,735	78,543	453,850
1983	118,550	82,211	415,398
1984	90,008	72,170	376,946
1985	73,442	69,659	337,337
1986	54,208	70,245	301,890

### Handgun Murders US and England & Wales, 2004-08

	Handgun Murders	Rate per Million People
United States	36,840	24.7
England & Wales	159	0.6

### Homicide and handguns

- Despite recent convergence US homicide rate per million people still 4x higher than UK
- Many other crimes lower in US
- Explanation:
  - Much greater availability of handguns in US
  - May not be the only reason – but clearly an important reason
- Perhaps more cultural readiness to use guns in a dispute
  - But which comes first? Readiness or availability?

### Lest we should doubt....

*Suppose all situational controls were abandoned: no locks, no custom controls, cash left for parking in an open pot for occasional collection, no library check-outs, no baggage screening at airports, no ticket checks at train stations, no traffic lights, etc.*

*Would there be no change in the volume of crime and disorder?*

Source: Nick Tilley and Gloria Laycock

### Society inadvertently creates crime...

1. Through manufacturing "criminogenic goods"
  - Cars with weak door and ignition locks
  - Credit cards with poor security
  - Unprotected software
2. Through "leaky systems"
  - Inadequate checking of insurance claims
  - Banking systems that facilitate money laundering
  - Inadequate controls on deliveries and shipping
3. Through poor management and design of facilities
  - Shop displays facilitating theft
  - Disorderly, overcrowded pubs and clubs
  - Poorly secured parking lots

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### Car theft claims: U.S. Highway Loss Data Institute (2001-2003)

HIGHEST		Theft Claims per 100
Cadillac Escalade	Luxury pickup	20.2
Nissan Maxima	Midsized 4-door car	17.0
LOWEST		
Buick Park Ave.	Large 4-door car	0.5
Ford Taurus	Wagon	0.5
AV. ALL CARS		2.5

### "Risky facilities" (80-20 rule)

1. USA Convenience stores: 6.5% have 65% of robberies
2. UK Banks: 4% have robbery rates 4-6 times higher than other banks
3. Stockholm schools: 8% suffered 50% of violent crimes in 1993/4 school year
4. Liverpool bus stop shelters: 9% experience 40% of vandalism

### City Center Parking Lots Nottingham UK, 2001

Car park	Spaces	Crimes Per 1000 Spaces	Car park	Spaces	Crimes Per 1000 Spaces
#1	1066	0.0	#11	167	53.9
#2	590	0.0	#12	412	63.1
#3	3000	3.7	#13	475	77.9
#4	1700	5.3	#14	50	140.0
#5	335	9.0	#15	625	164.8
#6	1200	19.2	#16	225	173.3
#7	125	24.0	#17	56	410.7
#8	600	25.0	#18	49	469.4
#9	425	40.0	#19	75	546.7
#10	550	47.3			

### The Methodology of Situational Prevention

- Focus on highly specific categories of crime or disorder
- Focus on crime concentrations
- Understand how the crime is committed
- Use an action-research / problem solving model
- Consider a variety of solutions

### City Center Burglaries (Poyner and Webb 1991)



- **Offenders:** On foot
- **Targets:** Cash and jewelry
- **Method:** Row housing so burglars could only break in at front
- **Prevention:** Improve security and surveillance at the front of the house

## Suburban Burglaries (Poyner and Webb 1991)



- **Offenders:** Used cars
- **Targets:** VCRs and TVs
- **Method:** Break-ins at back of house. Cars needed to get to the suburbs and to carry the stolen goods. Cars parked near to the house, but not so close as to attract attention.
- **Prevention:** Better surveillance of parking places and improved security at the back of houses. Crackdown on fencing of electronic goods.

## How is the crime committed?

1. Adopt the offender's perspective
  - "Think thief" (Ekblom)
2. Study how rather than why
3. Study the offence, step by step.
  - For example, Shoplifters must decide:
    - Which store to hit
    - Which goods to steal
    - How to accomplish the theft
    - How to escape from the store
    - How to sell the items and at what price
    - etc

## Action-research model of situational prevention

1. The problem is analysed
2. Hypotheses about causes are developed
3. Possible solutions are assessed
4. The chosen measures are implemented
5. The results are evaluated

(Essentially the same as the SARA problem solving model)

## 25 techniques of SCP (see handout)

### 5 main mechanisms:

- Increase the Effort
- Increase the Risks
- Reduce the Rewards
- Reduce Provocations
- Remove Excuses

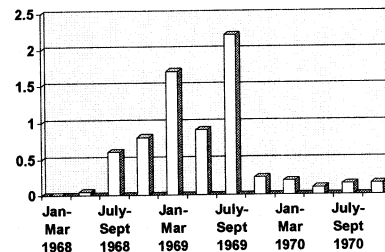
### 5 techniques for each

## 200+ evaluated SCP case studies (See Popcenter SCP database)

- Responsible drinking practices in Australia
- Cash reduction in US convenience stores
- Anti-robbery screens in London post-offices
- Car immobilisers in Europe and Australia
- Automatic checking of income statements by housing subsidy applicants in Sweden
- Ink tags on merchandise in clothing stores
- Speed cameras and random breath tests in Australia
- Safes with time locks to prevent betting shop robberies
- Removal of gas and electric coin meters from public housing in England to prevent burglary
- Video cameras in housing for retired persons
- And many, many more

## Crime is often dramatically reduced

Robberies of bus drivers, NYC  
Average daily incidents, 1968-1969  
(Chaiken et al. 1974)



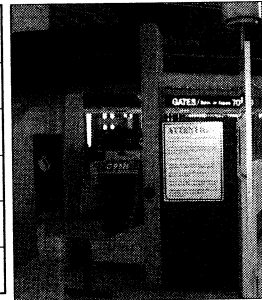
### Clean Cars on NYC Subway (Reduce rewards)



	Clean cars
1984	400
1985	1915
1986	3454
1987	4839
1988	6077
1989	6245

### Airline hijackings and baggage/passenger screening

Years	Hijackings per year
1961-67	2
1968-72	29
1973-85	10
1986-2000	1
2001-2003	2



### Simplistic thinking about displacement

1. "Bad will out" assumption grounded in dispositional/propensity theory
2. Rational choice assumes no compulsion for offenders to displace. Depends on:
  - Cost-benefits of displacement
  - Cost-benefits of other courses of action (eg getting a job)
3. In many cases, no reason to expect displacement – speeding, for example

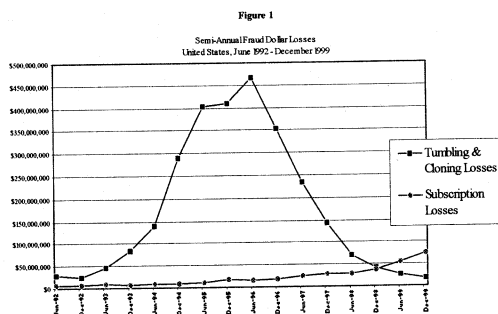
### Meta-analysis of displacement

Review of 102 situational prevention studies in which displacement was examined:

1. No displacement found in 68 of the studies
2. When found, displacement was never complete
3. Diffusion of benefits found in 39 of the studies

Guerette & Bowers (2009) "Assessing the Extent of Crime Displacement and Diffusion of Benefits: A Review of Situational Crime Prevention Evaluations." *Criminology* 47(4): 1331-1368

### Cell phone cloning in U.S.



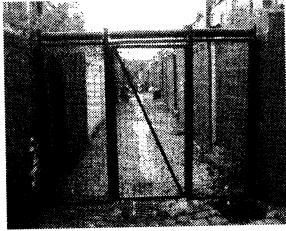
### Cloning study

Clarke, Kemper and Wykoff (2001)

- Criminals obtained mobile numbers by "scanning" calls or hacking into telecom databases
- Cloned phone calls cost the US industry \$800 million in 1995 alone
- 5 different technologies introduced to eliminate cloning (at a cost \$240 million)
- No real displacement to subscription frauds - these frauds not committed by organized crime

## Alley-gating in Liverpool

- 3178 gates installed
- Burglary reduced by 37% in first year
- No significant displacement
- Cost benefit ratio of gates in first year was 1.86
- Resident satisfaction and preventive gains sustained in later follow-up



## Claims of Displacement Often Wrong

- In the 1980s, Newport News Police (VA) cracked down on a street corner marijuana market leading to its closure.
- Some officers claimed the dealers had moved to a nearby corner.
- Closer study revealed:
  1. The nearby market was selling heroin, not marijuana
  2. No dealers from the marijuana market were found at the heroin market
  3. The heroin market was much smaller
  4. It predated the opening of the marijuana market

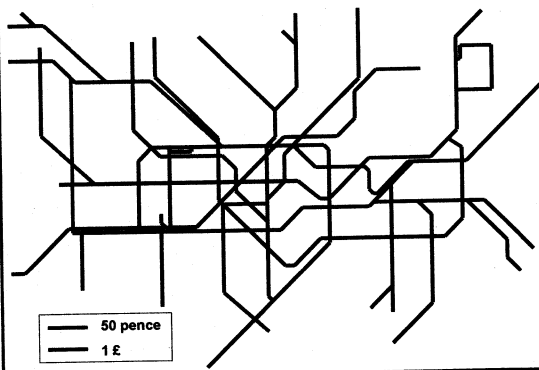
## Claims of Displacement Often Wrong Clarke, Codey & Natarajan 1994



## £ slugs appeared when 50p eliminated

	50p	£1
May 1990	17,066	0
July 1990	30,868	0
Sept 1990	48,402	0
Nov 1990	50,396	0
Jan 1991	56,791	0
Mar 1991	70,983	0
May 1991	93,404	135
July 1991	11,289	246
Sept 1991	0	2248
Nov 1991	0	1031
Feb 1991	0	1616

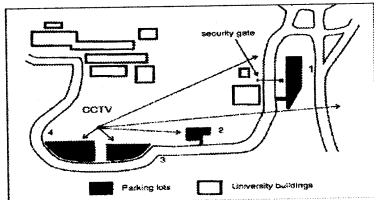
## But not at the same stations



## More reasons to doubt displacement

1. Many fewer £ slugs (<3,500 per month) than 50p slugs (95,000 per month at peak).
2. Any schoolboy could make 50p slug by wrapping a 10p coin in silver foil.
3. Only people with metal-working equipment could make £ slugs

## Diffusion of benefits: CCTV at Surrey University Poyner (1991)



## Other evaluated examples of Diffusion of Benefits

- "Red light" cameras in Strathclyde, Scotland
- Electronic tagging of library materials books at University of Wisconsin
- Improved security in NJ electronics retailer's warehouse
- Vehicle tracking systems (Lojack) in six North-eastern cities

## Displacement and Adaptation

### Displacement:

- Short term - When particular offenders change their behavior to defeat preventive actions

### Adaptation:

- Longer term - When the offender population as a whole discovers new crime vulnerabilities after preventive measures have been in place for a while.
- Adaptation is like an "arms race" between preventers and offenders

## UK Credit card fraud losses (£ Millions)

	Phone/ Internet	Application Fraud	Forged Card	Theft in Mail	Lost/ Stolen	Total
1992		1.4	8.4	29.6	123.2	165.0
1994	2.5	0.7	9.6	12.6	71.1	96.9
1996	6.5	6.7	13.3	10.0	60.0	97.1
1998	13.6	14.5	26.8	12.0	65.8	135.0
2000	72.9	17.4	107.1	17.7	101.9	317.0
2002	110.1	20.6	148.5	37.1	108.3	424.6
2004	150.8	36.9	129.7	72.9	114.5	504.8
2006	212.6	31.9	99.6	15.4	68.4	428.0

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## TO CONCLUDE

- SCP is a valuable resource for POP
- It has strong base in criminology, yet it is highly practical
- It has solid support from more than 200 published studies
- It provides a wealth of suggestions for reducing opportunities for crime
- It is highly compatible with POP in objectives and methods
- SCP is under continuous development