# Police and Crime Trends: The Good, The Bad, and the Problem

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# **Road Map**

- Start with "the bad news" of the decade of the 1970s.
  - Studies allowed inferences to "crime trends."
  - But they generally showed null effects.
- "Good news" of the 1990s/2000s
  - Well designed studies show positive crime prevention outcomes.
  - But they generally do not allow simple inferences to "crime trends."
- The problem is that the lesson of recent studies is that strong geographic focus is important.
  - A new generation of large scale multi-city trials is required to answer the crime trends question.

# The Bad

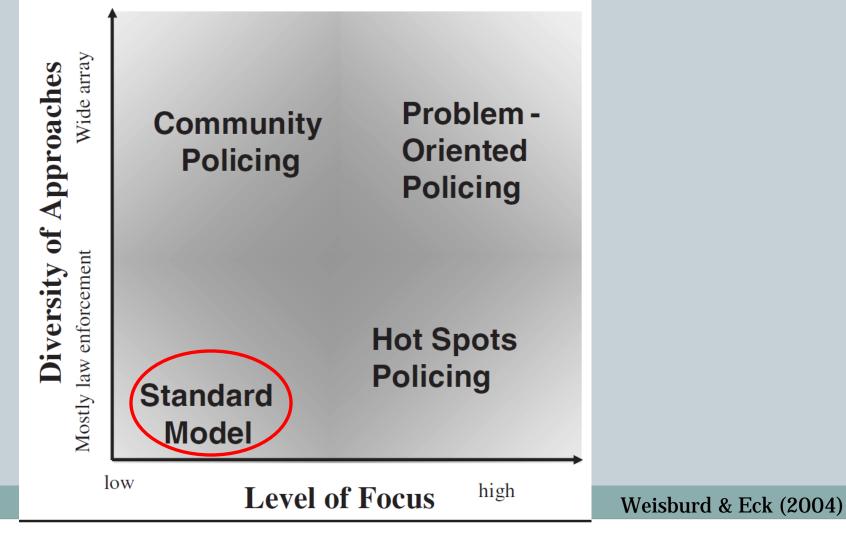
#### **NOTHING WORKS**

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1970-1990

# **Standard Model of Policing**

DIMENSIONS OF POLICING STRATEGIES



# **Challenges to the Standard Model of Policing**

- Standard model naturally led to the testing of police effectiveness at the city level or at least in large geographic levels.
- Evidence that the standard model of policing was ineffective in reducing crime at those geographies.
  - 1. Kansas City Preventive Patrol Experiment (Kelling et al., 1974)
  - 2. Rapid response to 911 calls study (Spelman & Brown, 1984)
  - **3.** Adding police to prevent crime (Levine, 1975)

# **Kansas City Preventive Patrol Experiment**

- Year long study (10/72-9/73)
- 15 Kansas City police beats in the South Patrol Division were "randomly" divided into 3 groups:
  - *1. Reactive*: No preventive patrol
  - *2. Proactive*: Preventive patrol increased 2 to 3 times its usual level
  - *3. Control*: Normal level of preventive patrol
- Preventive patrol did not significantly impact the incidence of crime or public perceptions of fear of crime.

Kelling, Pate, Dieckman, & Brown (1974)

# Rapid response to 911 calls for service

- Multi-site study, data collected between 1979 and 1980
- Interviews with over 4,000 victims, witnesses and bystanders involved in 3,300 serious crimes
- Police rapid response time does not increase the probability of arrest because:
  - 1. The majority of crimes reported are discovery crimes
  - 2. And, in involvement crimes, citizens wait too long to report the crime to the police
  - 3. Implication: The real issues is getting citizens to report crime quickly.

#### **Increasing Police Strength to Control Crime**

- Police departments tended to respond to public and political concern over rising crime rates by increasing the number of police officers on the street
- Levine (1975) examined the correlation between increasing police strength and crime rates in 10 cities using official record data and survey data
  - × He found that although most cities increased the size of their police force in the past decade, there was no impact of departmental expansion on crime reduction
- Concluded that merely adding more police officers was an ineffective crime control strategy

#### The Conclusion: No Impact on Crime Rates

"The police do not prevent crime. This is one of the best-kept secrets of modern life. Experts know it, the police know it, but the public does not know it. Yet the police pretend that they are society's best defense against crime This is a myth." —Bayley (1994: 3)

"...no evidence exists that augmentation of police forces or equipment, differential patrol strategies, or differential intensities of surveillance have an effect on crime rates."

-Gottfredson and Hirschi (1990: 270)

# The Good

#### 1990s/2000s

#### **EVIDENCE OF POLICE EFFECTIVENESS**

## **Reaction to Earlier Findings**

"Recently completed research questions the value of two major aspects of police operations – preventive patrol and investigations conducted by detectives. Some police administrators have challenged the findings; others are awaiting the results of replication. But those who concur with the results have begun to search for alternatives, aware of the need to measure the effectiveness of a new response before making a substantial investment in it." —Goldstein (1979: 240)

## Two Key Directions: Going Beyond the Standard Model

• Tightening the geographic focus of police interventions.

• Keeping dosage high where crime is concentrated.

• Evaluating police efforts where they occur, in order not to "water down" observation of treatment impacts.

#### • Going beyond law enforcement.

• Recognizing that community collaborations, situational prevention, and problem solving are key to police effectiveness.

# **Systematic Reviews of Policing Effectiveness**

- 16 completed or in press reviews related to policing
  - Focus primarily on Campbell because of high methodological standards, but include any reviews of rigorous studies of police activities/programs.
- Those reviews provide a very different portrait of policing than that gained in the 1970s and 1980s
  Not all programs work, but there is a large body of evidence that the police can do something about crime

## Effect Sizes from Policing Interventions Focused on Reducing Crime

Review	Outcome	Statistics for each study					Odds ratio and 95% CI					
		Odds ratio	Lower limit	Upper limit	p-Value							
Focused Deterrence	DMI	3.317	1.555	7.072	0.002							-
Focused Deterrence	Gang/Group	4.042	2.573	6.348	0.000					-		
Focused Deterrence	Individual	1.401	1.144	1.716	0.001					⊢		
Focused Deterrence	Mean Effect	2.991	1.884	4.748	0.000					∔⊸∎		
Hot Spots Policing	Increasing Police	1.227	1.088	1.385	0.001				-			
Hot Spots Policing	Mean Effect	1.396	1.233	1.581	0.000					⊦		
Hot Spots Policing	POP	1.523	1.280	1.813	0.000				-	■-		
Problem-Oriented Policing	Largest Effect	1.711	1.500	1.951	0.000					-=-		
Problem-Oriented Policing	Mean Effect	1.257	1.063	1.485	0.007					.		
Street-Level Drug Enforcement	Drug Calls for Service	1.330	1.071	1.652	0.010					-		
Street-Level Drug Enforcement	Drug Offenses	1.530	0.749	3.126	0.243							
Street-Level Drug Enforcement	Total Calls for Service	1.180	1.075	1.296	0.001							
Street-Level Drug Enforcement	Total Offenses	1.090	0.968	1.227	0.155				-			
Community Policing	Property Crime	1.053	0.978	1.133	0.169							
Community Policing	Violent Crime	1.098	1.015	1.188	0.020							
Second Responders	Reports on Survey	0.963	0.745	1.243	0.771							
Second Responders	Reports to Police	0.863	0.631	1.180	0.357			-	╼┼╴			
						0.1	0.2	0.5	1	2	5	]

Crime Increase

Crime Decline

#### The New Orthodoxy: The Police Can Prevent Crime

"The evidence is clear that large changes in police presence do affect crime rates. The change in presence may be the result of an unplanned event, such a terror alert that triggers a large increase in police officers in public spaces, or it may be a strategic response to a known crime problem, such as in hot spots policing deployments. In either case, crime rates are reduced in places where police presence has been materially increased. While far from the definitive, there is no evidence of displacement of crime to places contiguous to the heightened police presence, at least in the short run.

- Nagin (2013: 42)

# **The Problem**

#### WE KNOW LITTLE ABOUT WHAT INFLUENCE POLICE EFFECTIVENESS MAY HAVE ON CRIME RATES

## Micro vs. Macro Policy Evaluation

"A preoccupation with individual differences in criminal behavior and local responsibility for crime forms the cultural infrastructure of anticrime evaluation research, particularly in the United States. These deeply rooted theoretical and political predispositions are not so much incorrect as they are one-sided. Together they crowd out competing conceptions of crime and its control, and they hamper the development of a policy evaluation infrastructure that links evaluations to crime rates and crime rates to crime-producing social conditions... As knowledge of crime rates increases and is shared with the press and policy-makers, it may relieve the pressures on local officials to claim responsibility for conditions they cannot control and reveal the margins within which crime-control policy and practice can be truly effective."

- Rosenfeld (2005: 318)

# Most Persuasive Evidence is at a Low Geographic Level

- In a Campbell review Braga, Papachristos, and Hureau (2012) identified 25 experimental and quasi experimental studies.
  - 21 of 25 tests show statistically significant crime prevention benefits.
  - **o** 10 experiments—all showed significant effects
  - Significant evidence of diffusion of crime control benefits.

#### • Studies compare hot spots within areas.

- Provides for strong internal validity through randomization.
- Limits our ability to draw inferences about crime trends in large areas. Treatment and control are within areas.

# **Focused Deterrence/Pulling Levers Studies**

- City-level analyses in Boston (Braga et al., 2001), Indianapolis (McGarrell et al., 2006), Stockton (Braga, 2008), and Lowell (Braga et al., 2008) suggest these approaches can reduce gang violence relative to other cities (but see Rosenfeld et al., 2005)
- No experimental studies
  - Tendency of non-experimental studies to show larger effect sizes (Weisburd, Lum and Petrosino, 2001).
- These strategies are typically focused on individuals in particular geographic areas. Are citywide analyses appropriate and believable? (Wellford et al., 2005)
- Concern that as these programs grow, they become harder to sustain (Tillyer et al., 2012)
  - The more people that attend call-in meetings, the more resources it takes to ensure that the deterrent threat remains credible

### Observational Studies Examining Police Force Size and Crime

- Early research found little relationship between number of police and crime or sometimes even a positive relationship
  - Problem of police hiring occurring simultaneously with crime increases
- Many (but not all) recent studies suggest the number of officers has an impact on crime, although the size of this effect is inconsistent (see Chalfin & McCrary, 2013)
  - Range of elasticities across nine recent studies (many have large standard errors)
    - × Violent crime: -1.13 to 0
    - Property crime: -2.18 to +.11
  - Continued decline of crime in New York City during a period of declining manpower suggests it could be that the activities officers engage in are more important than the number of officers (Weisburd, Telep, & Lawton, 2014)
- These observational and quasi-experimental studies still face potential specification issues (see Marvell & Moody, 1996) and measurement error (see Chalfin & McCrary, 2013).
- Causality is very hard to establish!

## **Police Activities and City-Level Crime**

- Early studies (Wilson & Boland, 1978; Sampson & Cohen, 1988) suggested aggressive and proactive policing of more minor offenses was associated with lower citywide robbery rates
- Much of the more recent research has focused on the impact of order maintenance/Compstat in New York on the 1990s crime decline
  - Estimates of the size of the role policing played in this decline have ranged from large (e.g. Kelling & Sousa, 2001) to significant but more modest (e.g. Messner et al., 2007; Rosenfeld, Fornango, & Rengifo, 2007) to non-existent (e.g. Harcourt & Ludwig, 2006)
- Problems of causality and modeling!

# **Two Types of Evidence about Crime Rates**

- Logic models developing from strong studies.
  - Hot spots policing reduces crime at hot spots without displacement.
  - If hot spots policing were carried out with strong intensity it would influence crime rates.

#### • Estimates developed from "weaker" studies.

- Some newer evidence that department size affects crime, but substantial variation in effect size across studies.
- Moderate sized mean effect of pulling levers programs (Cohen's d = .604).

## Where Does this Leave Us?

- We believe there is evidence that police activities can impact crime rates.
  - We cannot draw strong inferences regarding how much.
- We need a new generation of studies that would randomly allocate large areas to innovative strategic approaches.
  - Example: Implementing hot spots patrol strategies in beats, or across cities.