

# Disorder and Social Control

## Experimental Evidence on Prosocial and Antisocial Behavior

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# Outline

1. Theoretical Framework

2. Project Structure

3. Experiments

- Lost Letter
- Mailbox Experiment

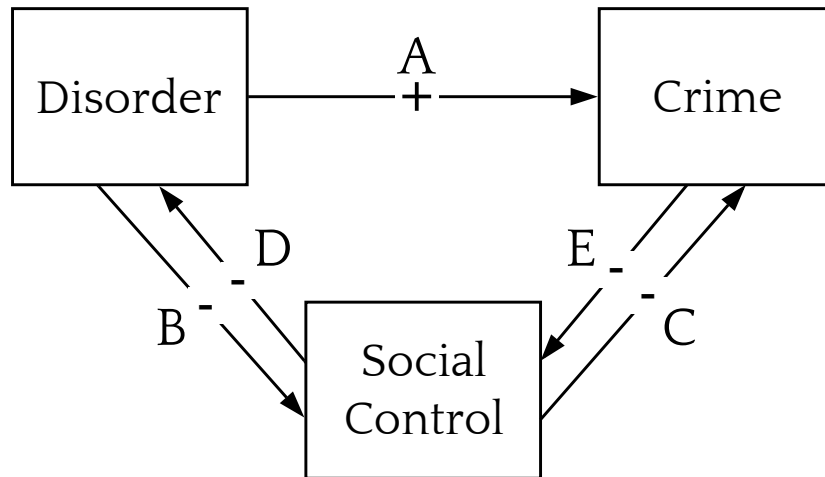
4. Summary

# Theoretical Framework

Neighborhood social control and crime

# Broken Windows

Wilson & Kelling (1982) describe a system where community disorder (1) increases crime by signalling low social control to offenders and (2) decreases actual social control by reducing willingness to use public spaces.

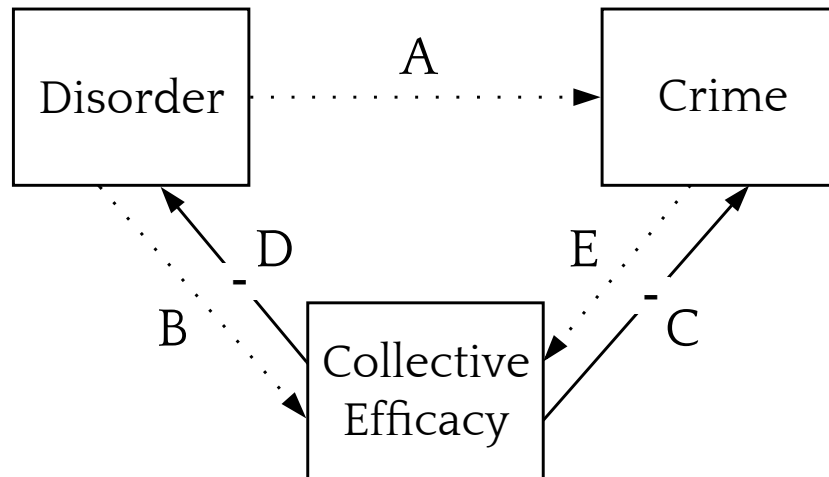


- A: Disorder signals low guardianship which increases offending.
- B, E: Disorder and crime constrain social relations and impede control.
- C, D: Social control inhibits both disorder and crime.

*This model is under-identified without instruments, manipulations, or repeated observations.*

# Collective Efficacy

Sampson & Raudenbush (1999) contend that disorder and crime are both manifestations of low collective efficacy—the community's capacity for informal social control.



- C, D: Disorder and crime are products of low collective efficacy—social control—which is exogenous (B, E).
- A: Disorder has no direct impact on crime.

*A, B, and E represent testable constraints on Broken Windows.*

# Our Review

Adjudicating between these models is difficult—[see our review for a discussion](#).

*Annual Review of Criminology*

## Broken Windows, Informal Social Control, and Crime: Assessing Causality in Empirical Studies

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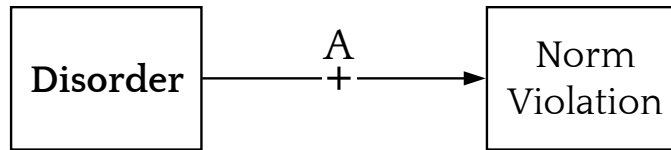
# Key Study

Keizer, Lindenberg, & Steg (2008).

# Keizer, Lindenberg, & Steg (2008)

Keizer et al. used disorder manipulations and recorded norm violation with field experiments in Groningen, the Netherlands.

Multiple interventions show a consistent positive relationship with norm violation.



- Powerful causal effect of disorder on multiple forms of norm violation (A).
- Single sites in one city: No examination of context, indirect pathways, or reciprocal effects.

*Can these be replicated in other locations? What is the influence of context?*



# Research Design

# Objectives

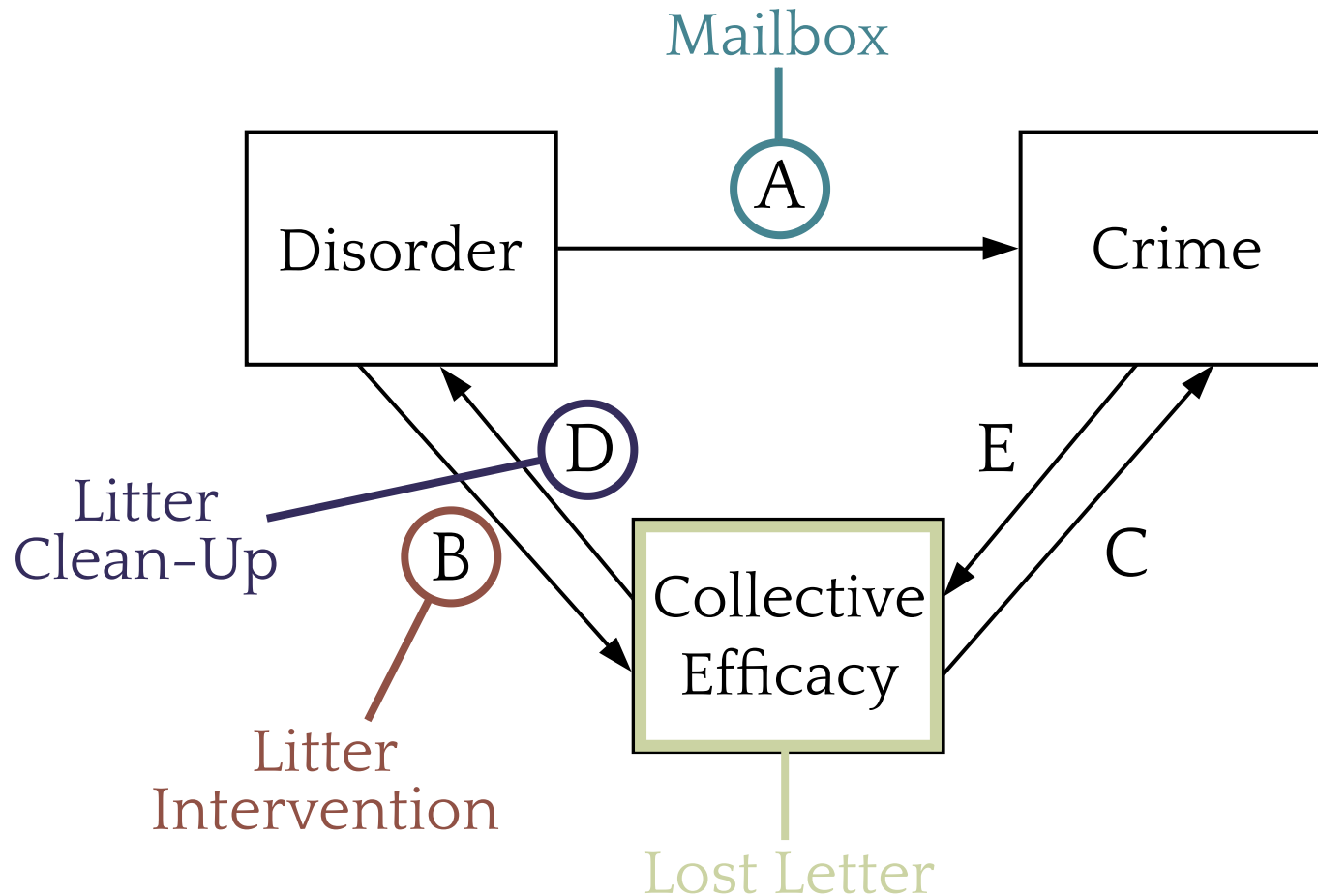
Our overall objective is to examine the links in the causal diagram.

We approach this with field experiments embedded in neighborhoods with rich contextual data from the 2003 Seattle Neighborhoods and Crime Survey.

Today I focus on two interventions:

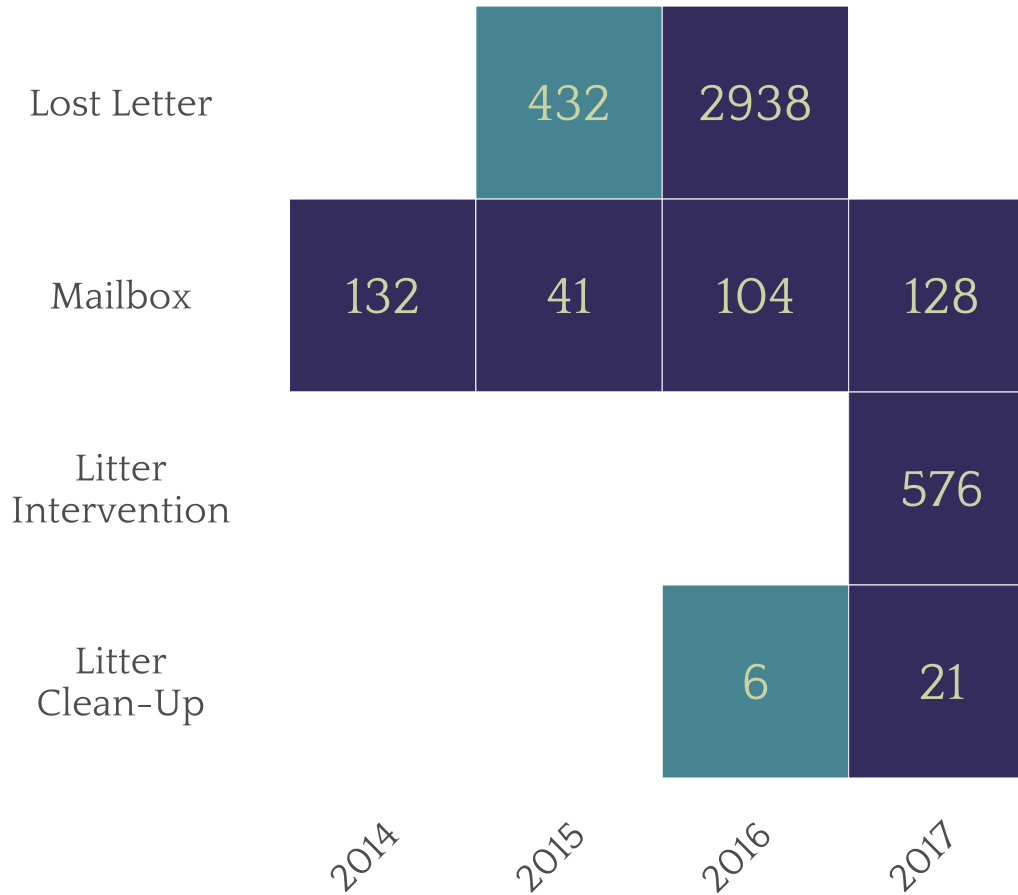
- Replicating Keizer et al. (2008) in Seattle neighborhoods
- Using the lost letter method to update collective efficacy

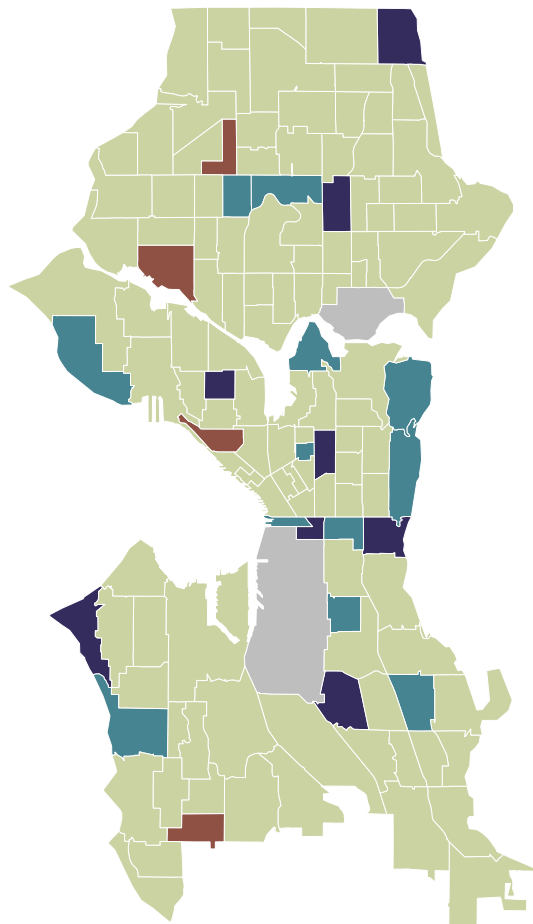
# Experiment Diagram



# Experiment Timeline

Number of trials





## Experiment

- Mailbox, Litter Intervention
- Mailbox
- Litter Intervention
- Only Letters
- No Letters

# The Experiments

# Lost Letter: Method

Replication of Milgram et al. (1965) and Sampson (2012).

2,938 letters were dropped on Seattle sidewalks for passersby to encounter.

24 letters—8 per addressee—were dropped in each census tract:

- Charles F. Landers Sr. (Personal)
- Friends of Black Lives Matter (BLM)
- American Neo-Nazi Party (Nazi)

Mailed letters were received at a PO Box monitored by the research team.

Letters were geocoded to drop locations.

# Lost Letter: Results

<i>Study (Letter Address)</i>	<i>Return Rate <math>\rho(CE)</math></i>	
<i>Milgram et al. (1965)</i> <sup>1</sup>		
Medical Research Associates	70%	--
Friends of the Community Party	70%	--
Friends of the Nazi Party	25%	--
<i>Sampson (2012)</i> <sup>2</sup>	33%	.41
<i>SNCP</i> <sup>3</sup>		
Charles F. Landers Sr.	79%	.35
Friends of Black Lives Matter	71%	.32
American Neo-Nazi Party	24%	.03

- Our results closely mimic Milgram et al. (1965).
- Collective efficacy does not predict Neo-Nazi letter returns.

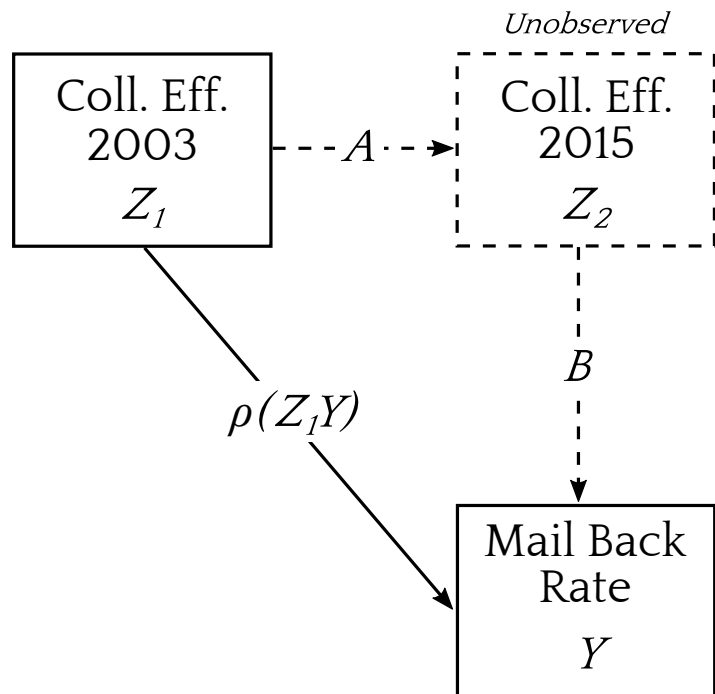
[1] New Haven, CT

[2] Chicago, IL

[3] Seattle, WA



# Updating Collective Efficacy



Empirical estimates:

- Sampson (2012) found  $A = .73$  over 7 years.
- Assume  $A = .50$  over 12 years.
- We find  $\rho(Z_1Y) = .35$  for personal letters.

Extrapolation:

- $\rho(Z_1Y) = A * B$
- $.35 = .50 * B$
- $B = .70$

Under some assumptions,

- Collective efficacy is highly correlated with letter returns.
- We have an updated measure of collective efficacy.

# Mailbox: Method

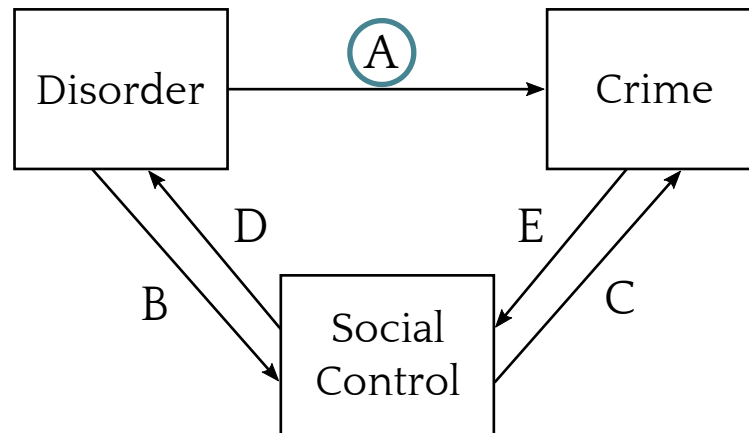


- A letter containing a visible \$5 bill is left near mailbox for passersby to encounter.
- Litter and a sign board with graffiti are introduced to manipulate disorder.
- Researchers record whether participants mail, steal, or ignore the envelope.<sup>1</sup>
- We conducted 405 trials with 3,671 participants in 20 Seattle census tracts.

[1] Perceived sex, age, and group size of participants were also recorded to adjust for compositional differences of tracts.

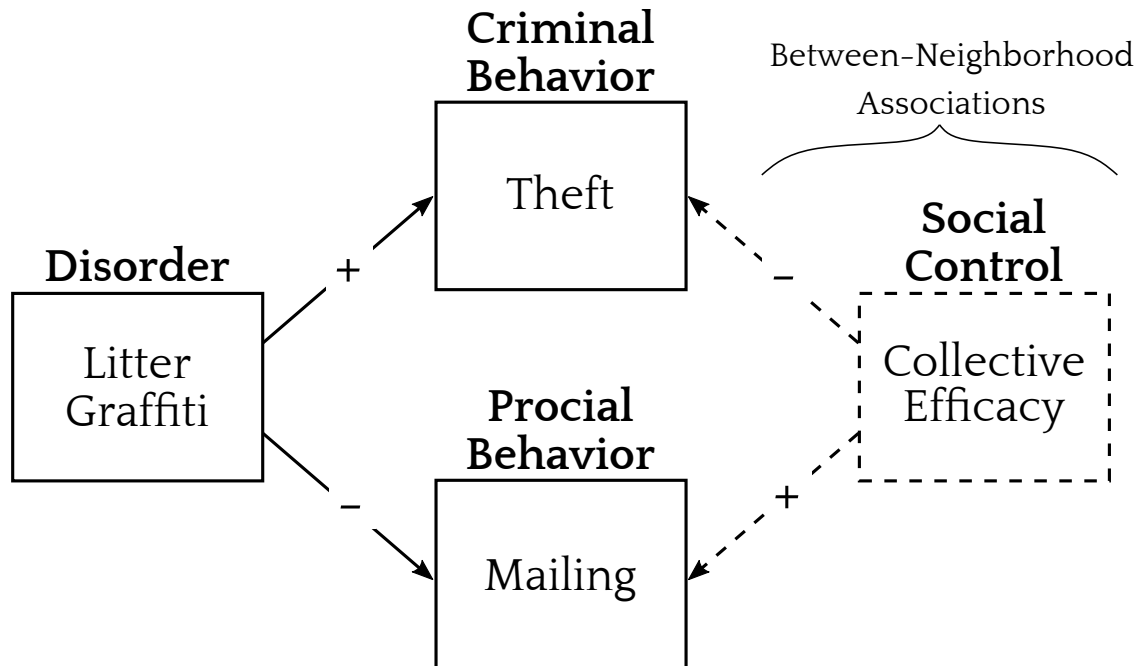
# Mailbox: Model

Objective: Causal test of direct effect of disorder on crime (A).



# Mailbox: Model

Our Experiment: Tests of causal direct effects of disorder on crime and prosocial behavior.



# Mailbox: Results

Mailbox: Participant Actions			
<i>Condition</i>	<i>Walk-By</i>	<i>Mail</i>	<i>Theft</i>
Control	1629	208	33
	87.1%	<b>11.1%</b>	<b>1.8%</b>
Treatment	1637	136	28
	90.9%	<b>7.6%</b>	<b>1.6%</b>

## Key Findings:

- Disorder has no impact on theft.<sup>1</sup>
- Disorder reduces the likelihood of mailing—resulting in the letter remaining on the ground longer.
- Collective efficacy is associated with lower theft, but not more mailing.

[1] There is no significant positive relationship in *any* location.

# Summary

- No disorder effect on theft (unable to replicate Keizer et al. 2008).
- Disorder attenuates mailing letters--low risk prosocial behavior (mailbox)
  - Perhaps disorder undermines informal social control--as suggested by Broken Windows.
  - *However, disorder had no effect on sanctioning--higher risk prosocial behavior (littering)*
- Context matters for prosocial behavior
  - Letter addresses affect mail back rates (lost letter)
  - *Race / gender of litterer effects sanctioning (littering)*
- Collective efficacy is associated with fewer thefts (mailbox)
- Collective efficacy is associated with mailing back letters (lost letter)

# Acknowledgements

Our findings are the result of over 2000 person-hours of field work over four summers. This project was made possible by the participation of graduate student researchers, grant funding, and institutional resources on campus.

## Researchers

Anquinette Barry

Chris Hess

John Leverso

Kate O'Neill

Terrence Pope

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# Litter Clean-Up: Alternative

We supposed the speed of return of lost letters was correlated with clean-up time of trash.

As a pilot, in selected trats, 24 pieces of litter were dropped in the same locations as lost letters and then checked three times over the course of a day.

Neither timing nor a binary measure of clean-up were found to be associated with either lost letter returns or overall collective efficacy.