

The Less Than 1%: Groups and the Extreme Concentration of Urban Violence

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Research Question

Q: What proportion of a city's population is group-involved and to what extent are they connected to a city's serious violence?

Motivations:

- Growing concentration studies
- Confirming group concentration theory
 - Formalizing the informal common sense
- Advancing violence prevention field



Existing Literature

- Crime → Violent Crime → Concentration → Social Concentration → Groups/Gangs
- Focus: estimates of group violence concentration
 - 1. Estimates of % homicides and/or shootings related to groups/gangs, and
 - 2. Estimates of % population in groups/gangs
- Peer-reviewed articles on focused deterrence implementation
- Government and practitioner reports
 - "Action Research"



Literature Summary

- **12** publications with unique results
 - 8 report all-age citywide homicide estimate
 - **3** report on shootings
- Coverage:
 - 11 cities (9 full)
 - Years: 1990-2016
- Inconsistent methodology
 →Thin evidence; no single
 authoritative reference

STUDY	TYPE	CITY	AREA	DATA POP.
KENNEDY, PIEHL, & BRAGA 1996	Peer- reviewed	Boston	Partial	Under 21YO
KENNEDY & BRAGA 1998	Peer- reviewed	Peer- reviewed Minneapolis		Full
TITA ET AL. 2003	Government report	Los Angeles	Partial	Full
BRAGA 2008	Peer- reviewed	Stockton	City	Full
MCGARRELL & CHERMAK 2003	Government report	Indianapolis	City	Full
BRAGA, MCDEVITT, PIERCE 2006	Peer- reviewed	Lowell	City	Full
ENGEL, TILLYER, CORSARO 2013	Peer- reviewed	Cincinnati	City	Full
BRAGA, HUREAU, WINSHIP 2008	Peer- reviewed	Boston	City	15-24 YO
CORSARO & ENGEL 2015	Peer- reviewed	New Orleans	City	Full
SIERRA-AREVALO, CHARETTE, & PAPACHRISTOS 2017	Peer- reviewed	New Haven	City	Full
GILBERT, CRANDALL, & WAKELING 2014	Organization report	Oakland	City	Full
FOX & NOVAK 2018	Peer- reviewed	Kansas City	City	Full



Methodology

- Paper: compiled data from reports on Group Violence Intervention (GVI)
 - Groups: "gangs, crews, sets or any social network involved in violence"
- Source: GVI "Problem Analyses"
 - Action research advising exercises advised by NNSC
 - Problem analysis → Problem analysis report
 → Problem analysis table → Paper



Methodology

Group Audit and Incident Review



Group Member Involvement (GMI)



Methodology

• Group Audit



Incident Review



Data Variables and Sources

Problem Analysis:

- Group member count
- Homicide incidents
 - GMI homicide incidents
- Nonfatal shooting incidents (injury)
 - GMI nonfatal shooting incidents

Census:

• City/site population

Site	Site Population	Group Member Count	GMI Population (%)	Homicide Data (months)	Homicide Incidents (#)	GMI Homicide (#)	GMI Homicide %	Shooting Data (months)	NFS Incidents (#)	GMI NFS (#)	GMI NFS %
South Bend	101,168	637	0.63	68	66	36	54.55	32	169	74	43.79



Data

Available Datasets (N = 23)			
Description		Count	
Site Type	Full Cities	19	
	City Segment	4	
Population Size	Small	9	
	Medium	6	
	Large	8	
Region	Northeast	9	
	South	7	
	Midwest	5	
	NA	2	
Problem Analysis Year	2014	6	
	2015	9	
	2016	2	
	2017	5	
	2018	1	
Data Type	Homicide	23	
	Non-fatal Shooting	20	
Small (X < 75,999 people); Medium (76,000 < X < 124,999); Large sites (X > 125,000)			



Datasets

Public Use	Pending
Albany (NY)	City L
Birmingham (AL)	City I
Buffalo (NY)	City G
Chattanooga (TN)	City F
Gary (IN)	
Jacksonville (FL)	
Kalamazoo (MI)	
Minneapolis (MN)	
Newburgh (NY)	
Peoria (IL)	
Savannah (GA)	
South Bend (IN)	
Troy (NY)	
Wilmington (DE)	
York (PA)	
City Segments	
Baltimore Eastern District	Segment K
Baltimore Western District	Segment J



Data

- N = 23 problem analyses (21 locations)
- 120 month window; significant density





Results

Sites	Mean GMI %	Mean GMI Population %
Full City Homicide (N = 19)	50%	0.60%
Full City Shootings (N = 16)	53%	0.58%
City Segment Homicide (N = 4)	50%	0.64%
City Segment Shootings (N =4)	61%	0.64%
Total Homicide (N=23)	50%	0.60%
Total Shootings (N=20)	55%	0.60%



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Total Homicide (N=23)	50%	0.60%	
Total Shootings (N=20)	55%	0.60%	

Actual group-involved perpetrators/victims are a small % of this %



Main Finding: Homicides Full City Homicide (N=19)



0.60% of total population



Main Finding: Homicides City Segment Homicide (N=4)



0.64% of total population



Main Finding: Shootings Full City Shootings (N=16)



0.58% of total population



Main Finding: Shootings City Segment Shootings (N=4)



0.64% of total population



Examples: Small City, Segment, Big City



In Minneapolis, 0.15% of the population was involved in groups, but this population was connected to 53.96% of shootings: a proportion over 350 times higher than their population representation.



Variation: Homicides





Variation: Shootings





Limitations

- Selection bias:
 - Cities with group violence problems?
 - Regional?
 - Smaller cities?
- Methodological consistency
 - Problem analysis quality
- Timing
 - Limited timeframe
 - Different years of study
 - Historical review versus real-time tracking



Possible Extensions + Analysis

- Expand dataset to include more sites
 - Size, region, inequality, violence variation
- Create intentional research agenda
 - Consistent methodology
- Test concentration versus contextual variables
 - City size, population density, poverty, unemployment, etc.



Discussion

- First cross-site comparison of group violence concentration
- New, strong evidence of group violence concentration in American cities
- Triples existing data points on group violence concentration
- Confirms previous literature and affirms working knowledge of practitioners:
- Less than 1% of a city's population is connected to ~50% of violence
 - ...and that's likely an underestimate



Practical Implications

- Reaffirming existing practices on group violence
 - Focus on high-risk people
 - Recognize concentration of victimization
- Moving towards a general understanding of violence concentration
 - Shift public attitudes and fear of crime
- Reorienting public safety and criminal justice practice





What did we miss?

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