

Geographic profiles of violent clients of prostitute women and clients overall

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“Most traffic accidents occur within 25 miles of home.”

“More pedestrians get hit by cars when crossing the street in crosswalks than elsewhere.”

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Are these useful facts for understanding risk or planning intervention?

NO! At least not by themselves ...

Need comparative, actuarial approach (contrast with frequency of trips within 25 miles of home, frequency of street crossings in crosswalks)

Investigative and scientific value of an offender profile depends on specificity and discriminative power (between offenders & non-offenders)

Case-control research designs needed (Cook et al., 2005; Fox & Levin, 1998)

- **cases = offenders**
- **controls = non-offenders in underlying reference population**

Apply this approach to geographic profile of violent clients of prostitute women and clients in general

Prostitute women have the highest homicide victimization rate of any set of women studied, account for ~ 3% of female homicide victims in US (Potterat et al, 2004)

- clients = 75-92% of perpetrators in U.S. (Brewer et al.)**
- need effective profile of offenders**

Prostitution is a problem for public safety, order, and health

- characterize clients as a step toward more effective enforcement/prevention**

Case-control comparisons:

1) violent clients of street prostitutes vs. clients overall

- **journey-to-crime distance (residence - victim encounter/arrest locations)**

- **victim encounter locations vs. prostitution arrest locations**

2) clients vs. general population of adult males

- **representativeness of client arrest locations (re prostitute arrest locations)**

- **geographic distribution of locals**

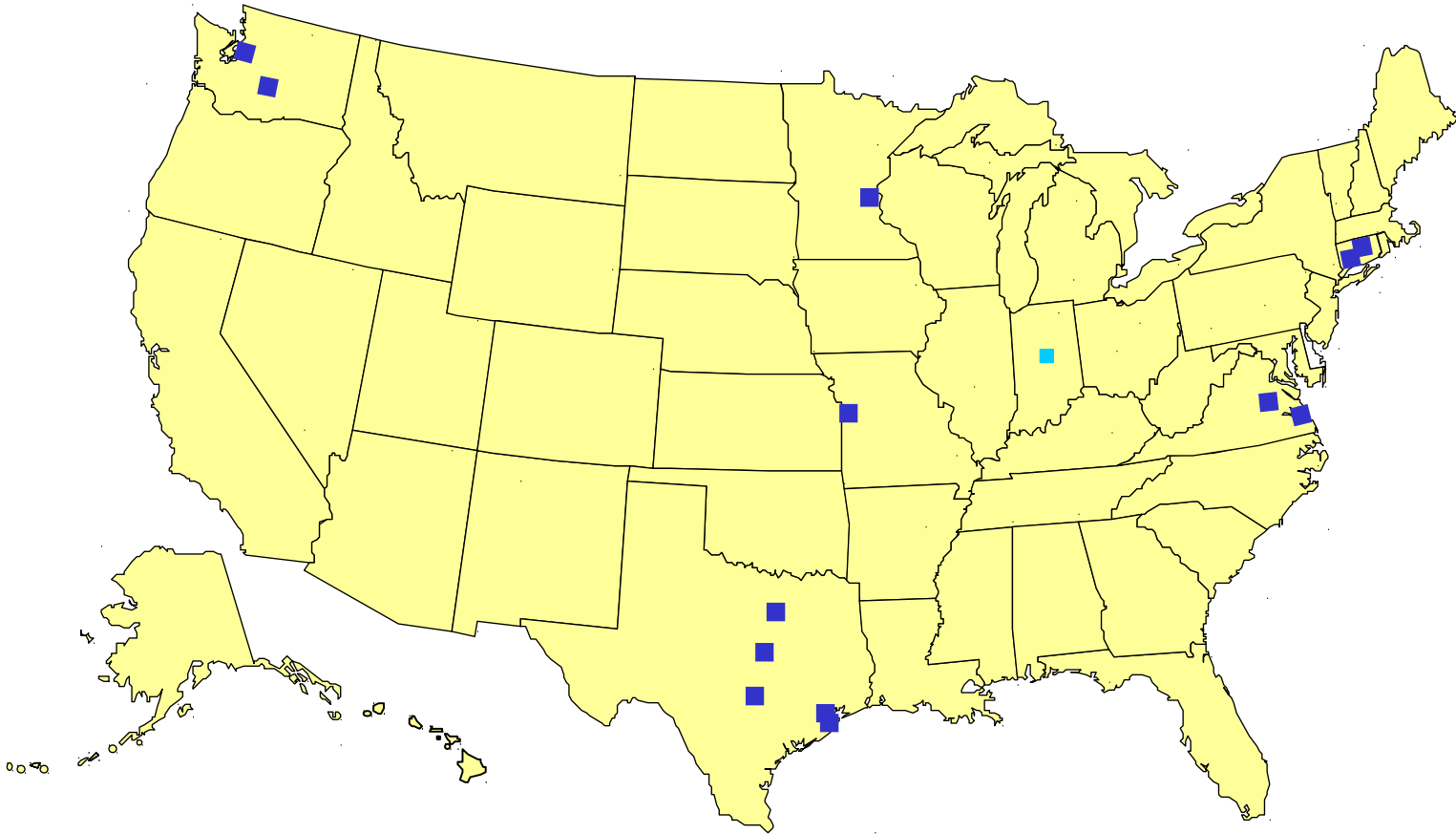
**Cases = violent clients charged with/
convicted of assaulting, raping, and/or killing
street prostitute women -- cleared cases**

- **identified from extensive search of newspaper databases, World Wide Web, academic/true crime literature, incidental discoveries; sought crime reports**

**Controls = clients identified from local/state
CJ agency prostitution arrest records**

- **patronizing-specific charges, patronizing evident in arrest narrative, or inferred by 5+ male arrests in a day or multiple male arrests close in space/time**

Case-control jurisdictions



■ cases and controls with any geographic data

■ controls with geographic data but no cases

■ no cases, or no controls with geographic data

For each case, randomly matched 5 controls arrested in same jurisdiction as and within 10 years (50% w/in 1 year) of case's attack(s)

- total sample = 46 cases (with 88 geocodable victim encounters), 230 controls**

Computed road (“network”) and Euclidean journey-to-crime distances

- some jurisdictions provided only city of arrest/residence for controls**
 - used city hall/major municipal building as approximate residence/arrest location**
- serial offenders (cases) - mean/median/first**

Proportion of all cases & controls who are local residents (journey distances within 50/80 km)

	<u>n</u>	<u>% < 50 k</u>	<u>phi</u>	<u>OR</u>	<u>p*</u>
Cases	46	89	-.09	0.45	.17
Controls	230	95			

	<u>n</u>	<u>% < 80 k</u>	<u>phi</u>	<u>OR</u>	<u>p*</u>
Cases	46	89	-.13	0.30	.05
Controls	230	97			

Results based on road distances; cases: results identical for mean/median/first distance

*Fisher's exact test

Proportion of all cases who killed 1+ victims & their controls

	<u>n</u>	<u>% < 50 k</u>	<u>phi</u>	<u>OR</u>	<u>p*</u>
Cases	25	92	-.02	0.79	.67
Controls	125	94			

	<u>n</u>	<u>% < 80 k</u>	<u>phi</u>	<u>OR</u>	<u>p*</u>
Cases	25	92	-.05	0.58	.62
Controls	125	95			

Results based on road distances

*Fisher's exact test

Journey-to-crime road distances (km) for cases with precise geocodes & their controls (KC, Minneapolis, WA)

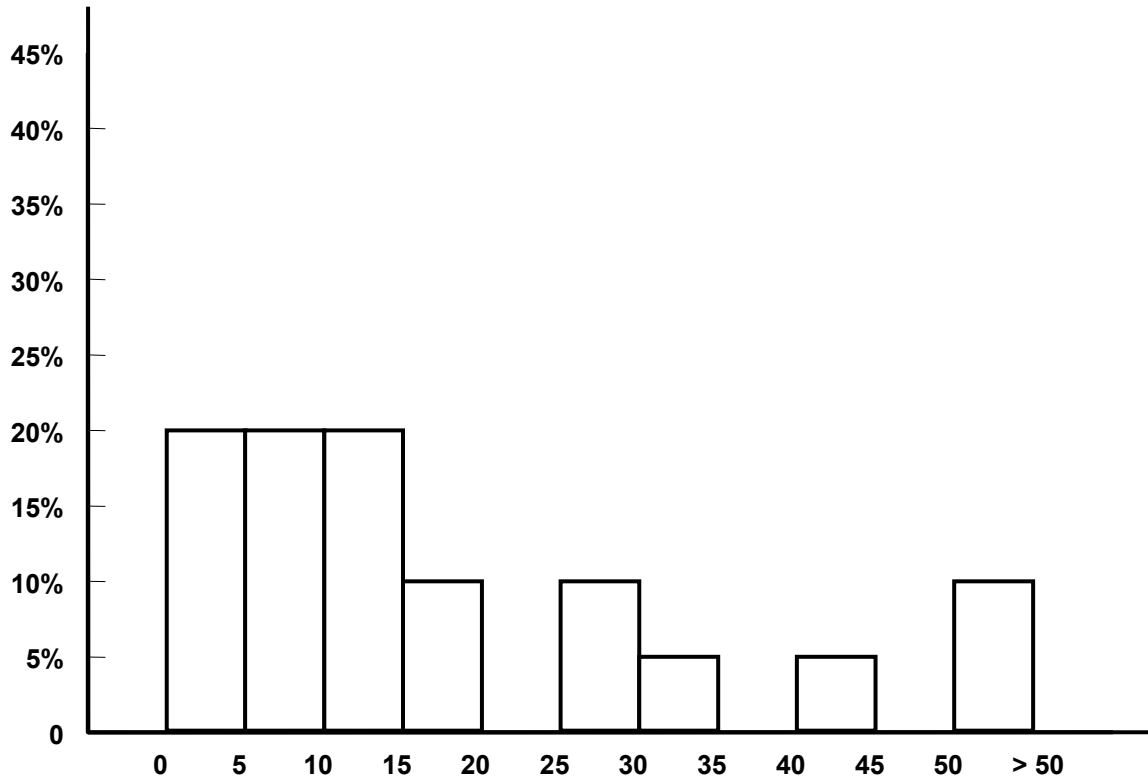
	<u>n</u>	<u>mean</u>	<u>median</u>	<u>max</u>	<u>p*</u>
Cases	20	180.6	11.0	2168.3	.16
Controls	100	16.6	8.7	244.6	

Results based on road distances; cases: mean of means, medians, & first all within .15 k

*Mann-Whitney test

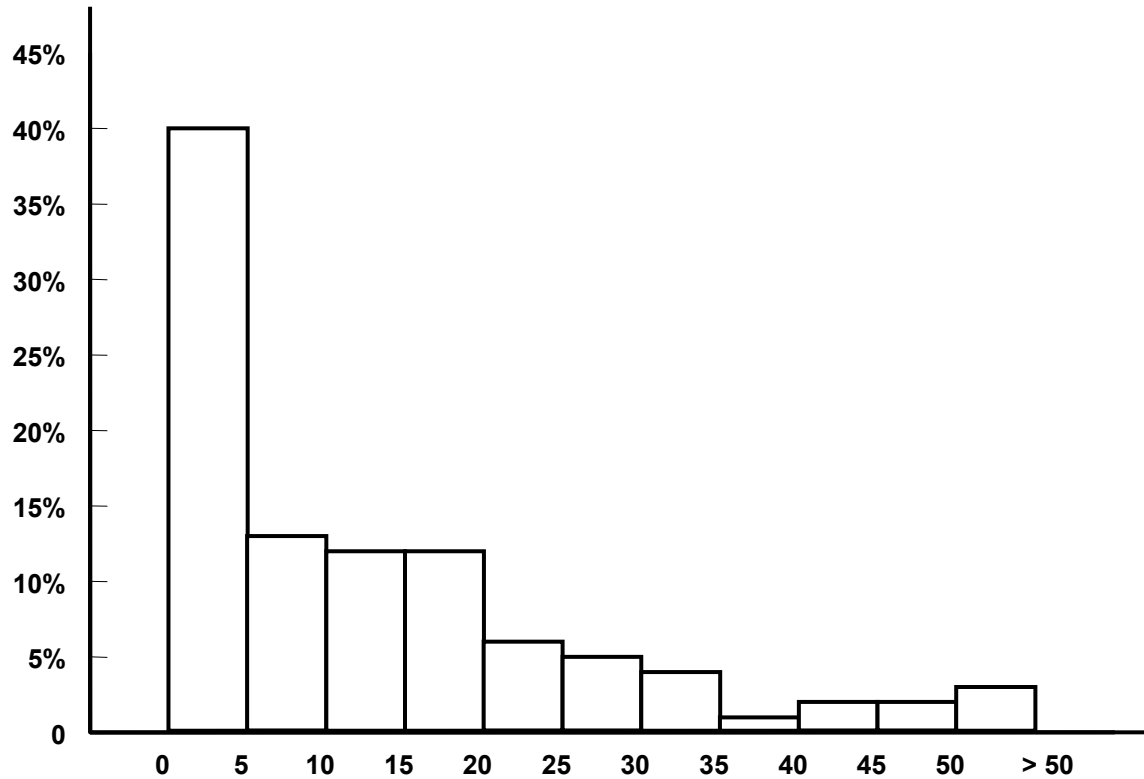
Euclidean distances show similar degree of differences for all case-control comparisons

Cases with precise geocodes (n = 20)



Journey-to-crime distance (km)

Controls (n = 100)



Journey-to-crime distance (km)

NCAVC/FBI sample (Dudek) of 54 prostitute killers (3 in media sample) -- journey-to-crime road distances

- **offenders: 98% < 50 km; max = 230 km**
 - **mean = 6.0 km, median = 1.6 km**

Geographic dispersion of attacks by same perpetrator

- of 249 violent clients overall (incl. 118 serial perps), 8 had victims encountered in widely separated locations (> 120 km road dist.)
 - 3 were long-haul truck drivers, most victims associated with truck/rest stops
 - 3 had only one victim each at a location far from his other encounter sites
 - 1 had two victims spatiotemporally distinct from main cluster and each other
 - 1 had two geographically separate series (480 km apart)

Road distance between cases' victim encounter locations and prostitution arrest locations

<u>City (n incidents)</u>	<u>15th closest prostitute arrest < 0.5 km</u>	<u>5th closest client arrest < 0.5 km</u>
Kansas City (10)	40%	30%
Minneapolis (13)	62%	62%
Seatac, WA (5)	---	100%
Seattle, WA (13)	---	69%
Yakima, WA (4)	---	100%
Overall (45)	52%	64%

NCAVC/FBI sample (Dudek)

- **of 79 victims killed by clients with known encounter locations:**
 - **44% encountered in “known” stroll areas**
 - **25% encountered in foot traffic vice areas**

Comparison of geographic distribution of clients vs. general population of adult males

representativeness of client arrest locations

- **complaint-driven enforcement**
- **prostitution activity measured by prostitute arrests (many arrests in small area = a stroll)**
 - **13% random sample of KC client arrests**
 - **for 83% of KC client arrests, 15th nearest prostitute arrest is within 0.2 km**

Other jurisdictions, comparisons with general pop. geographic distributions in progress

Conclusions

Both violent clients and clients overall are overwhelmingly local

- **journey-to-crime distance not useful for profiling violent clients**
- **journey-to-crime ~ journey-to-routine-activity (patronizing in this instance)**

Difference between media and NCAVC samples underline sampling/jurisdictional variability & need for control comparisons

Most efforts to link geographically distant prostitute victims unlikely to be successful

Perpetrators encountered most victims on/very near strolls known by police, thus surveillance potentially productive

Vice operations against clients in same areas as those against prostitutes (1st criterion for representativeness of client arrests)

~ 20 more cases forthcoming for geocoding

Comparisons of violent and arrested clients on demographic, physical characteristic, & criminal history variables also in progress (total n cases = 199)

More project info: www.interscientific.net