Using Social Network Analysis in Focused Deterrence Initiatives

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LSU
Social Networks & Criminal Webs

- **Actors** (e.g., a group or gang members)
- **Ties** (e.g., involvement in a common criminal incident)

Note: Role (offender/victim) not often differentiated.
Linkage Vs. Social Network Maps

Evidence Recovered (2):
(1) Winchester 40 S&W Casing
(1) Bullet
(1) Bullet Fragment

Evidence Recovered (3):
(5) 9mm Casings
(3) .40 cal Casings
(5) 9mm Lead Bullets
(3) 45mm Casings

Additional Victims of Property Damage and Vehicles (SEE REPORT)

Suspect
7373 Pembroke St., Baton Rouge, LA 70807
Crime Description: Attempted Second Degree Murder AND Felon In Possession

Victim
2255 72nd Ave., Baton Rouge, LA 70807

Suspect
2255 72nd Ave., Baton Rouge, LA 70807

Grand Jury Indicted
06/08/15
Crime Description: Attempted Second Degree Murder AND Felon In Possession

BRPD 16-57185
Attempted 2nd Degree Murder Case #2
05/06/16 23:20
2500 71st Ave., Baton Rouge, LA

NIEN HIT .40 cal

NIEN HIT .40 cal

NIEN HIT .40 cal

unknown suspect

PD 16-607657
06/15/16 15:33
2255 72nd Ave., Baton Rouge, LA 70807
Crime Description: Attempted 1st Degree Murder AND Illegal Use of a Weapon

PD 16-53798
05/28/16 14:20
1819 N. Marque Ave Dr., Baton Rouge, LA 70815
Crime Description: Attempted 1st Degree Murder AND Illegal Use of a Weapon

NIEN HIT .40 cal

PD 16-60503
06/14/16 20:21
2255 72nd Ave., Baton Rouge, LA 70807
Crime Description: Attempted 1st Degree Murder AND Illegal Use of a Weapon

Evidence Recovered:

Smith & Wesson
SN: HFA3721
.40 cal Revolver

(4) PMC Rounds

(3) Winchester Stamped .40 cal Rounds
Baton Rouge Area Violence Elimination (BRAVE)

2012
- BRAVE Project Director
- Consult D. Kennedy, NNSC
- LSU Research Partner
- Exxon-Mobile Industrial Partner
- Chief Fealey, Officer Training
- 1st Community Engagement Meeting
- Service Provider Network formed
- Living Faith press conference
- Univ. Of Cincinnati training

2013

2014
- NNSC training
- Project Safe Neighborhood (PSN) expansion
- “Cops & Clergy” training

2015
- IDP training
- Crime Strategies Unit (CSU) introduced

2016-18
- Community building & relationship formation
- Project Safe Neighborhoods (PSN) - Youth Gun Accident Prevention & Wellness Promotion

New Form

New Norm
Focused Deterrence

“Pulling levers”

Show that the cost of crime outweighs the benefits. (Zimring & Hawkins, 1973)

- Identify the primary crime and target offenders.
- Communicate these messages:
  - You are targeted by the initiative. Here’s why...
  - Levers are in place. They are...
  - Community imperative: Crime must stop!
- “Pull levers” that:
  - sanction target offenders and their groups
  - offer preventative services/resources
- Convene an interagency team.
Focused Deterrence aided by Social Network Analysis

Show that the cost of crime outweighs the benefits. (Zimring & Hawkins, 1973)

1. Identify the primary crime and target offenders

2. Communicate these messages
   You are targeted by the initiative.
   Here’s why...
   Levers are in place. They are...
   Community imperative:
   Crime must stop!

3. “Pull levers” that:
   sanction target offenders and their groups
   service

4. Convene an interagency team.
Networks are comprised of...

(2) Types of **Actors**:

**Egos** (focal actors) who are connected to **Alters** by one or more types of interdependencies (**ties**).

- E.g., friendship, kinship, common incidents, financial or information exchange, or relationships of beliefs, knowledge or prestige.

Criminal incident links people to an event, place and/or time.

**Social Network Analysis (SNA) =**

- Analytics about the network of actors linked to incidents
- Graphic depiction of the network of actors linked to incidents
Whole ("Complete") Networks

- For defined populations. Rare in crime mapping.
- Contains information about
  - actual and potential ties
- Snowball sampling
  - "Who else do you know in this gang?"
- Inclusive population census
  - Historical records

Joe Bonanno
Lucky Luciano
Carmen Celante
Francisco Costiglia
Giuseppe Profaci
Ego Networks

E.g., 1

- More common in crime mapping
- Ties from egos (targets) to their alters.

E.g.1, John is a group-member with 6 criminal associates

Note: Ties are UNDIRECTED.
Ego Networks

E.g., 2

E.g. 2, John is a group-member who sells narcotics to 6 criminal associates.

Note: Ties can be DIRECTED to illustrate flow of resources.
E.g. 3, Ego can also be a target group with 6 criminal incidents.
Focused Deterrence
aided by Social Network Analysis

Show that the cost of crime outweighs the benefits. (Zimring & Hawkins, 1973)

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You are targeted by the initiative.
Here's why...
Levers are in place. They are...
Community imperative:
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service

4. Convene an interagency team.
Among the Top 25 “Most Dangerous Cities” in the U.S. - Business Insider, 2012
1. Identify Target Offenders

The Need

Who is committing violence?

Is it gang-related?

Are these people operating as a group?

The Method

Which groups/associates
- Homicide Review
- Group Audit

The Proof

“Gang” identification Criteria
U.S. Office of Justice Programs

1) 3 or more individuals
2) Adopt group identity to intimidate using markers (e.g., name, slogan, symbol, hand sign, graffiti, tattoo, etc.)
3) Engage criminal activity and violence to intimidate, or to enhance or preserve the group’s reputation
4) May employ some of the following:
   - Rules for joining
   - Physical protection of its members
   - Control over particular location or interest against rivals
   - Identifiable structure
1. Identify Target Offenders

The Need

The Method

Which groups/associates
- Homicide Review
- Group Audit
- Social network analysis of associates, potential members, and conflicts/collaborations

The Proof

Insight:
- Potential members
- Potential informants

Blocks = people linked by violence
Directed Line = violent offense against someone
Color = group member
1. Identify Target Offenders

The Need

The Method

Which groups/associates
- Homicide Review
- Group Audit
- Social network analysis of associates, potential members, and conflicts/collaborations

The Proof

Insight:
- Potential members
- Potential informants
- Potential new groups/clusters
1. Identify Target Offenders

The Need

The Method

Which groups/associates

- Homicide Review
- Group Audit
- Social network analysis of associates, potential members, and conflicts/collaborations

The Proof

Insight:

- Which groups are active (or are about to be)
1. Identify Target Offenders

**Evaluative Uses**

1. Increases/Decreases in group-related violence over time

2. Increases/Decreases in group-on-group violence over time

3. Coupled with GIS, increases/decreases in group activity in target areas
2. Communicate Message

The Need
The Method
The Proof

• Aiding Call-ins and Custom Notifications

To whom do we target communications?
2. Communicate Message

The Need
The Method
The Proof

Differences in:
• Violence
• Influence
• Power

Group Network
Circle = Offender
Line = Violent incident
2. Communicate Message

The Need
The Method
The Proof

Differences in:
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Group Network
Circle = Offender
Line = Violent incident

3. Communicate & Pull Levers

**Evaluative Uses**

- Track pre-to-post declines in criminal activity among Call-in participants

**The Need**

**The Method**

**The Proof**

*But, if the effect is truly diffusive....*
3. Communicate & Pull Levers

The Need

The Method

The Proof

Evaluative Uses

- Track pre-to-post declines in criminal activity among the associates of Call-in participants

What’s going on with their associates?
4. Convene a Team

Complex social problems require multi-sector collaboration (Kania & Kramer, 2011).
4. Convene a Team

The Need
The Method
The Proof

YOUTH SERVICE PARTICIPATION

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<th>YEAR 2</th>
<th>TOTAL</th>
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Strengthen community capital

“ALONE WE CAN DO SO LITTLE; TOGETHER WE CAN DO SO MUCH.”
- Helen Keller
4. Convene a Team

The Need
The Method
The Proof
4. Convene a Team

The Need
The Method
The Proof
4. Convene a Team

Using networks to build mutually compatible collaborations

Rizzuto, Brown & Singh (under review)
4. Convene a Team

The Need

The Method

The Proof

Evaluative Uses

• A picture says a 1000 words!

• Metrics to track
  o Growth in ties (collaborations) per partner over time
  o Growth in average ties (collaborations) across the initiative
  o Collaborative density over time

2014

2016
Where to find networks?

Social Media*
- Facebook
- Instagram
- Youtube
- Snapchat
*with caution

Archives
- Criminal incident reports
- National Integrated Ballistics Information System (NIBIN)
- Jailhouse call data
THANK YOU!

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