# Modifiers of Neighbors' Bystander Intervention in Intimate Partner Violence: A Concept Mapping Study

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# DISCLOSURE SLIDE

- The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:
- o None

## **ABSTRACT**

- <u>Background</u>: Encouraging bystander intervention to prevent intimate partner violence against women (IPVAW) is an important violence prevention strategy. Most research is campus-based, thus our understanding of bystander intervention among adults living in urban areas is underdeveloped.
- Methods: We conducted a concept mapping study with residents (41) of a low-income New York City neighborhood. Whether feasibility (i.e., that the participant "could" or "would" enact it) and effectiveness of bystander intervention varied by couple- and family-level characteristics was assessed. We conducted multidimensional scaling and agglomerative cluster analysis to create a concept map of bystander behaviors. Uni- and bi-variate analyses examined differences in feasibility and effectiveness by 1 couple-level characteristic (i.e., have history of breaking up or have been together a long time or have a history of IPV) and 1 family-level characteristic (i.e., children live in apartment or may witness violence), and participant sociodemographic characteristics.
- Results: A 13-cluster solution emerged, with clusters grouped in four areas: victim-, parenting/ education-, perpetrator-, and community-focused. Bivariate analyses revealed that participants rated all areas as more feasible when a child is involved. Men rated intervention as less feasible when the couple had a history of IPV. Participants who reported a history of IPV victimization rated all areas as less effective, as compared with participants without IPV history.
- <u>Conclusions</u>: Engaging urban residents in bystander intervention may be an effective way to prevent IPV and change social norms. The presence of children may encourage such intervention, but also complicates it. Further research is needed on factors that moderate intervention.

# **LEARNING OBJECTIVES**

- Explain how neighbors may enact informal social control of intimate partner violence against women (IPVAW) via bystander intervention behavior.
- Describe what perceived couple- and family-level factors modify self-reported likelihood of bystander intervention among residents of a low income neighborhood in New York City.
- Discuss how results may inform future neighborhood-based bystander intervention programs with the goals of preventing primary IPVAW, changing social norms around IPVAW, and changing social norms around intervention to prevent IPVAW.

#### **BACKGROUND**

- Intimate partner violence against women (IPV) is a serious public health and social problem
- Associated with significant and multiple adverse health and social outcomes for women, men, children, families and communities.
- O How do we prevent IPV?
- Primary and secondary prevention
- Prevention efforts @ levels of the human ecology:
  - individual
  - dyadic
  - family
  - community/ neighborhood

#### **BACKGROUND**

- Basic research into the neighborhood or community context and IPV is accumulating.
- Theoretical Bases
  - social disorganization theory
  - collective efficacy theory
- Mixed empirical findings related to neighborhood
  - Unclear what neighborhood factors relate to distribution of IPV
  - Unclear what mechanisms of control are at work
- Do the processes of control hypothesized to be at work, actually work?
- What do people say about these processes?
- What actions can we imagine taking?
- What modifies our willingness to take action?

## **BACKGROUND**

#### **Social Control of IPV**

- Formal social control = social welfare, criminal-legal and public health/care systems (statues, policies, etc.)
- Informal social control = behaviors that individuals and groups undertake to maintain group norms of behavior
- Social disorganization/collective efficacy theory
- The "action" component of collective efficacy is informal social control of "deviance"
  - Measured by aggregating individual-level, predicted likelihood that a neighbor would "do something" in response to "deviant" behaviors:
    - children were skipping school/hanging out on a street
    - children were spray painting graffiti on a local building
    - fight in front of your house/someone being beaten or threatened
- This is BYSTANDER INTERVENTION BEHAVIOR

## **BYSTANDER INTERVENTION**

- Bystander intervention behavior is conceptualized as a cognitive and affective decision-making process influenced by individual, situational and contextual factors (Banyard, Plante, & Moynihan, 2004).
- Bystanders experience difficulties in deciding whether or not to intervene.
- The following factors affect intervention:
  - Situational context
  - Norms
  - Outcome expectations
  - Experience as a former victim or witness
  - Similarities with the victim
  - Actions taken by others (Banyard, 2008; McMahon & Banyard, 2012; Casey & Ohler, 2011; Fischer et al., 2011 (Casey and Ohler 2012).

## **MODIFIERS OF BYSTANDER INTERVENTION**

- Prior victimization and the presence of children are two factors that affect formal controls (e.g. police response) and may also influence bystander behavior (Weller, Hope, & Sheridan, 2013; DeJong, Burgess-Proctor, & Elis, 2008; Davies & Roger, 2009).
- Waltermaurer's (2012) review found consistent and strong justification for and tolerance of IPV, from men and women alike, when people suspect the neglect or poor mothering of a child (Waltermauer, 2012).
- Other qualitative work reveals that people view women less as "victims" and more as "bad mothers" when children are involved (Kelly, 2009).
- The presence of children in the home both inhibits and motivates victim help-seeking (Kelly, 2009; Swanston, Bowyer, & Vetere, 2013; Finkelhor, Wolak, & Berliner, 2001)
- Unclear how it influences bystander behavior (Fledderjohann & Johnson, 2012), especially in the context of IPV.

### **MODIFIERS OF BYSTANDER INTERVENTION**

# • The study had three primary objectives:

- describe community-generated bystander intervention strategies;
  - "one specific action that a neighbor or group of neighbors could do to prevent a woman from experiencing partner violence is...".
- examine whether situational characteristics (e.g. indicators of a history of IPV in the couple or presence of a child) influence participants' self-reported willingness to engage in such strategies; and
- explore group differences in the perceived feasibility and effectiveness of the bystander strategies generated.

## STUDY METHODS: CONCEPT MAPPING

#### Concept mapping is a multi-step research method

- 1. The "focal question" to be posed to the group is developed:
  - "one specific action that a neighbor or group of neighbors could do to prevent a woman from experiencing partner violence is..."
- 1. One or more groups of participants "brainstorm" responses to the focal question, resulting in "statements"
- 2. Statements are reviewed:
  - redundant statements eliminated
  - overlapping statements collapsed
  - a parsimonious set of clear statements
- 3. Participants then "sort" statements into piles that are related in a way that makes sense to the participant
- 4. Participants also rate each statement on various domains
- 5. Piles and ratings date are entered and data are analyzed using the Concept Systems© software
- 6. Results are presented to the group and discussed
- 7. Action steps are taken based on results

# **STUDY METHODS: PROCEDURES**

- Eligibility:
  - 18+ years old
  - able to read and write in English
  - residents (self-reported) of the focal neighborhood
- Brainstorm and "Sort and Rate" groups were held separately and lasted @ 3 hours each
- 3 groups with 41 participants
  - Over 200 statements reduced to 72
- 41 participants sorted and rated the statements
- Study reviewed by New York Blood Center IRB and informed consent collected from all participants.

# **STUDY METHODS: PROCEDURES**

## **Sorting Procedure**

- Participants sorted all 72 statements into conceptually related piles or in ways that "made sense to them"
- Created labels for each pile that described the pile

## **Rating Procedure**

- Participants rated each statement on the following:
  - Feasibility for YOU (Likert-type scale; likelihood "you could and would")
  - Feasibility "if a child was in the home"
  - Feasibility "if the couple has a history of abuse"
  - Effectiveness for preventing IPV (either again or at all)
    - 1 (lowest or "not at all") to 5 (highest or "extremely")

## **STUDY METHODS: Assessing Feasibility**

How feasible (you COULD and WOULD do this action) would it be for you, if any of the following circumstances apply:

## History of Abuse:

- the couple breaks up and gets back together often
- the couple has been together for a very long time
- the woman stays with the man, or defends him, even though he is abusive to her?

#### Children Present:

- there are kids living within the apartment
- you know that kids are at least sometimes involved with, or witness, the abuse?
- Participants scored each statement using a 5-point Likert scale, where 1 is "not at all feasible/effective," 2 is "not very feasible/effective," 3 is "moderately feasible/effective," 4 is "very feasible/effective," and 5 is "extremely feasible/effective."

# **STUDY METHODS: ANALYSIS**

# Concept mapping uses two statistical techniques:

# Multidimensional scaling (MDS)

MDS is used to create a visual map of the distance between each group of statements.

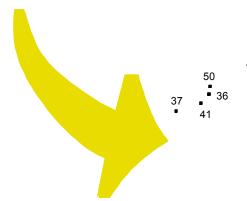
## Hierarchical cluster analysis

Cluster analysis is used to group the statements using the data from the "sorting" exercise.

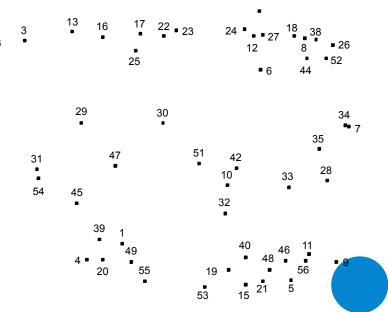
The MDS solution is restricted to two dimensions in concept mapping and yields an x, y value, which when plotted are the point on the concept map. Hierarchical cluster analysis partitions the multidimensional scaling map hierarchically into non-overlapping clusters (Anderberg, 1973; Everitt B, 1980).

1       5       0       0       0       1       0       0       2       0         2       0       5       3       0										
2       0       5       3       0       0       0       0       0       0         4       0       3       5       0       0       0       0       0       0       0         0 <td>5</td> <td>1</td> <td>2</td> <td>4</td> <td>0</td> <td>1</td> <td>1</td> <td>3</td> <td>1</td> <td>0</td>	5	1	2	4	0	1	1	3	1	0
4       0       3       5       0	1	5	0	0	0	1	0	0	2	0
0     0     0     0     5     0     0     2     0     0       1     1     0     0     0     0     5     0     0     4     0       1     0     0     0     0     0     5     0     0     0       3     0     0     0     2     0     0     5     0     0       1     2     0     0     4     0     0     5     0	2	0	5	3	0	0	0	0	0	0
1     1     0     0     0     5     0     0     4     0       1     0     0     0     0     0     5     0     0     0       3     0     0     0     2     0     0     5     0     0       1     2     0     0     0     4     0     0     5     0	4	0	3	5	0	0	0	0	0	0
1     0     0     0     0     0     0     0       3     0     0     0     2     0     0     5     0     0       1     2     0     0     0     4     0     0     5     0	0	0	0	0	5	0	0	2	0	0
3 0 0 0 2 0 0 5 0 1 2 0 0 0 4 0 0 5	1	1	0	0	0	5	0	0	4	0
1 2 0 0 0 4 0 0 5	1	0	0	0	0	0	5	0	0	0
	3	0	0	0	2	0	0	5	0	0
	1	2	0	0	0	4	0	0	5	0
	0	0	0	0	0	0	0	0	0	5

Input: A square matrix of relationships among a set of entities

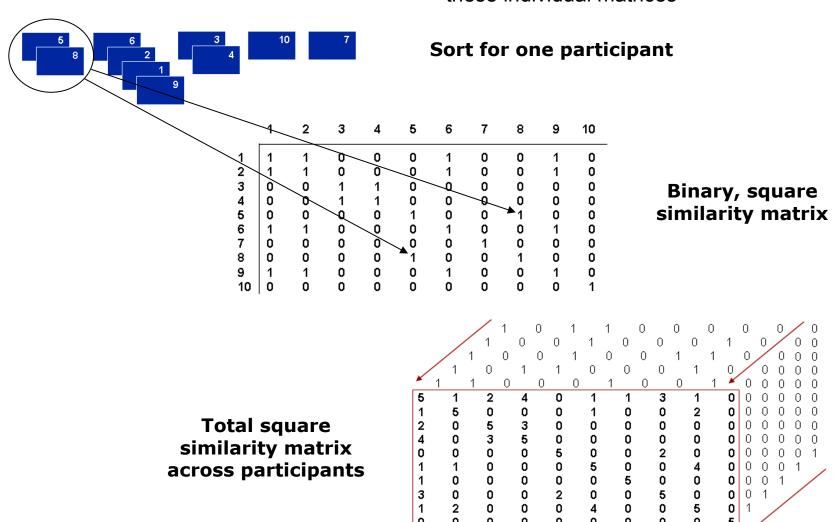


Output: An n-dimensional mapping of the entities

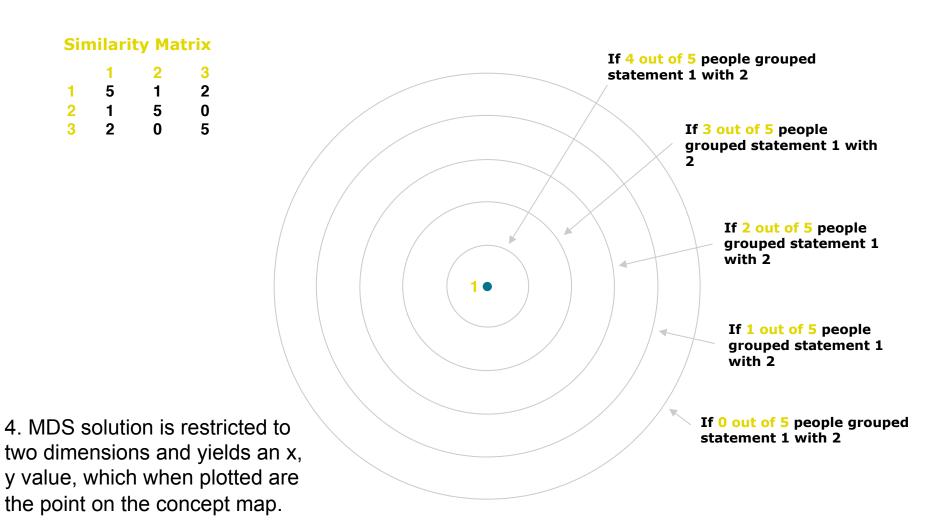


## REPRESENTATION

- 1. Each participant's sort is converted to a 0,1 cooccurrence matrix
- A group similarity matrix is created by summing these individual matrices

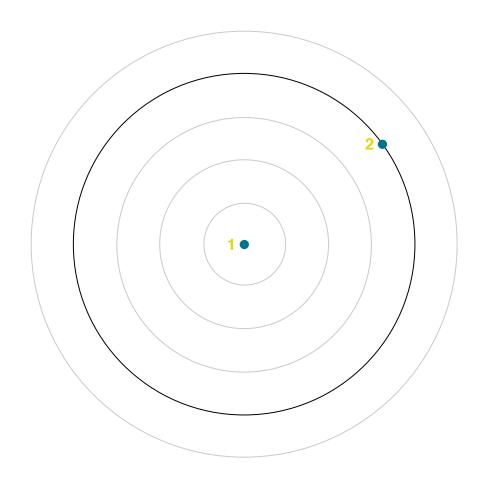


3. To "map" the data, the summed square similarity matrix table is represented as distances in Euclidian space



#### **Similarity Matrix**

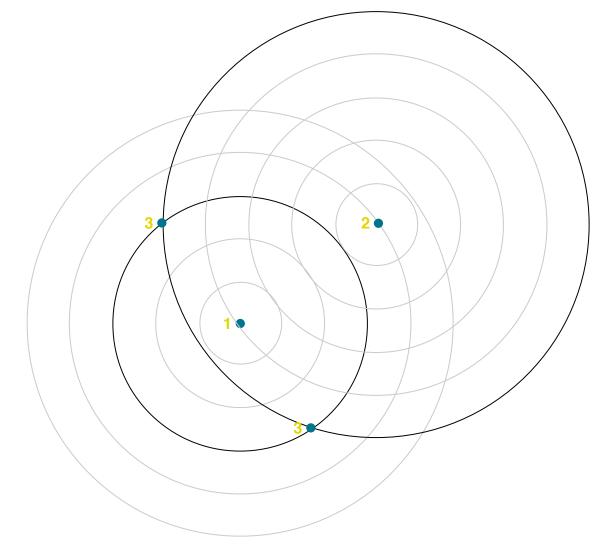
	1	2	3
1	5	1	2
2	1	5	0
3	2	0	5



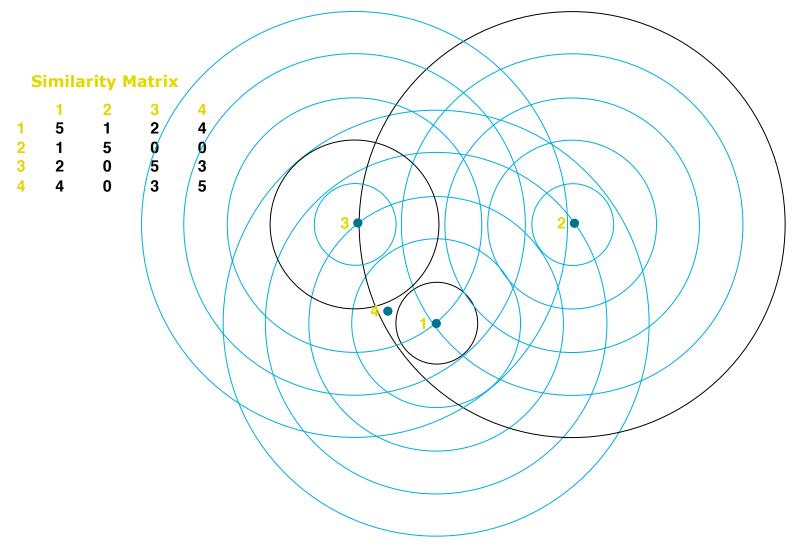
# Multidimensional Scaling

#### **Similarity Matrix**

1 2 3 1 5 1 2 2 1 5 0 3 2 0 5



# Multidimensional Scaling



# Multidimensional Scaling

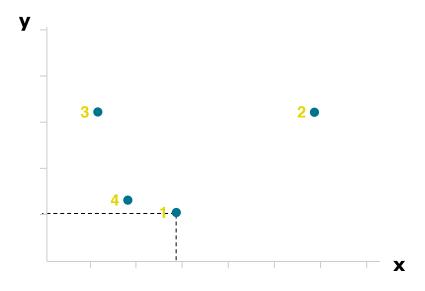
#### **Similarity Matrix**

	1	2	3	4
1	5	1	2	4
2 3	1	5	0	0
3	2	0	5	3
4	4	0	3	5

A map can be depicted as a coordinate matrix

# **Coordinate Matrix**

	^	y
1	2.8	1.0
2	5.9	3.2
3	1.1	3.2
4	1.9	1.3



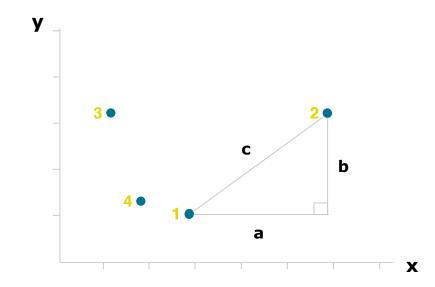
#### **Similarity Matrix**

	1	2	3	4
1	5	1	2	4
2 3	1	5	0	0
3	2	0	5	3
4	4	0	3	5

A map can be depicted as a coordinate matrix

# **Coordinate Matrix**

	X	У
1	2.8	1.0
2	5.9	3.2
3	1.1	3.2
4	1.9	1.3



And from the coordinates we can compute the distances between all pairs of points

$$a^2 + b^2 = c^2$$

a = difference between x valuesb = difference between y values

c = distance

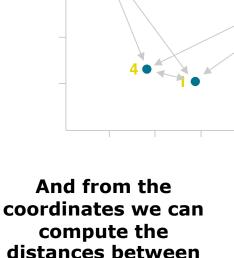
#### **Similarity Matrix**

	1	2	3	4
1	5	1	2	4
2 3	1	5 0	0	4 0 3
3	1 2	0	5	
4	4	0	3	5

A map can be depicted as a coordinate matrix

# **Coordinate Matrix**

	X	У
1	2.8	1.0
2	5.9	3.2
3	1.1	3.2
4	19	13



all pairs of points



	1	2	3	4
1	0.0	3.2	2.8	1.1
2	3.2	0.0	4.8	4.6
3	2.8	4.8	0.0	2.1
4	1.1	4.6	2.1	0.0

And can show these as a matrix of distances between points

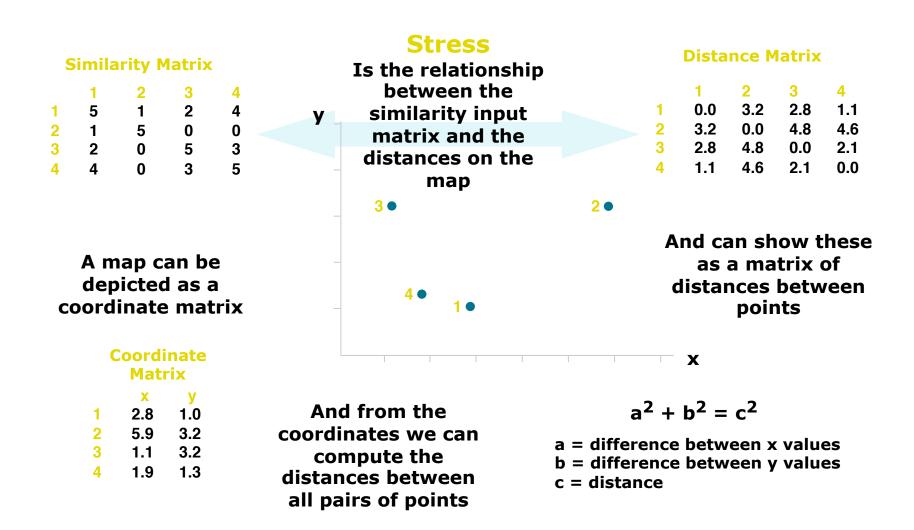
$$a^2 + b^2 = c^2$$

X

a = difference between x values

**b** = difference between y values

c = distance



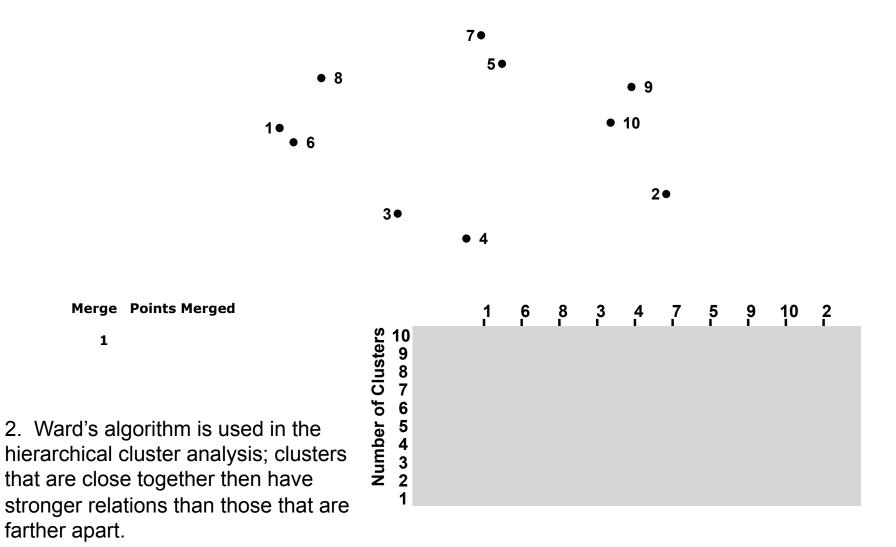
Similarity Matrix		Similarity Matrix Is the relationship				<b>Distance Matrix</b>					
	1	2	3	4	between the		1	2	3	4	
1	5	1	2	4	similarity input	1	0.0	3.2	2.8	1.1	
2	1	5	0	0	matrix and the	2	3.2	0.0	4.8	4.6	
3	2	0	5	3	distances on the	3	2.8	4.8	0.0	2.1	
4	4	0	3	5		4	1.1	4.6	2.1	0.0	
					map						

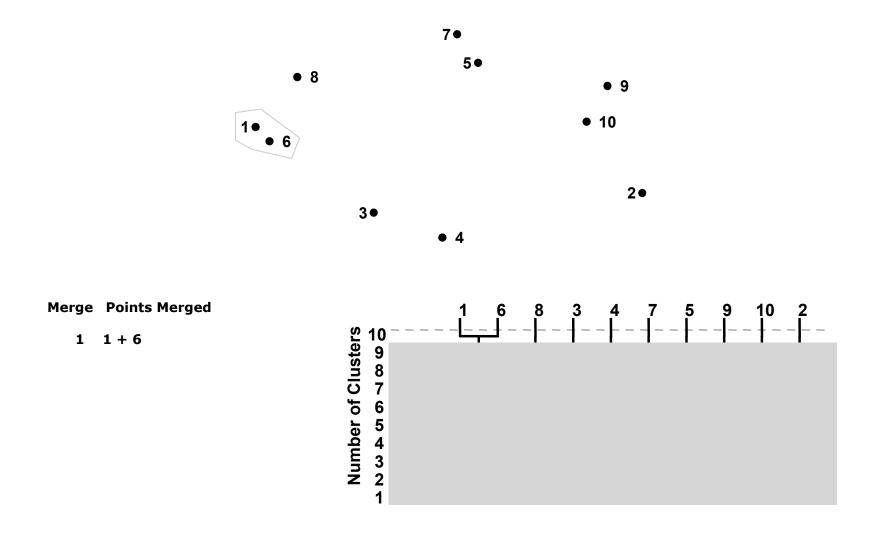
Similarities		Distances
1,1 5	Low stress values	1,1 0.0
1,2 1 1,3 2	means there is a	1,2 3.2 1,3 2.8
1,4 4	greater	1,4 1.1
<b>2,2 5</b>	correspondence	<b>2,2 0.0</b>
<b>2,3 0</b>	between the	<b>2,3 4.8</b>
2,4 0	similarities and the	<b>2,4 4.6</b>
3,3 5	map	3,3 0.0
3,4 3 4,4 5	<b></b>	3,4 2.1 4,4 0.0
*		•

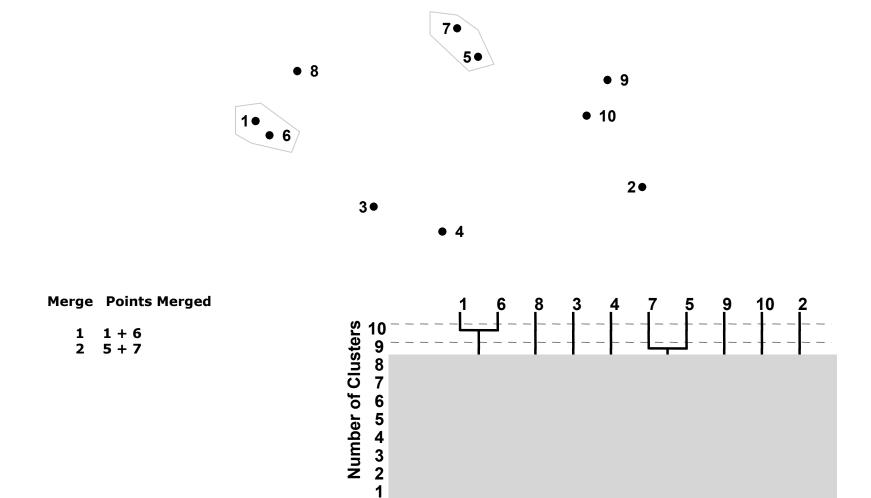
From: Trochim, B. Concept Mapping: An Introduction to

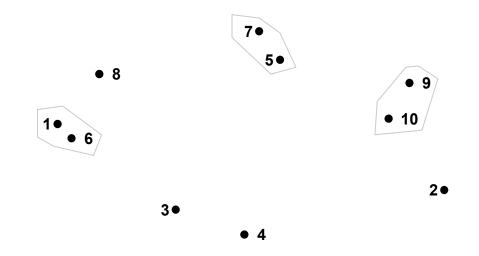
Structured Conceptualization. 01/05

1. Agglomerative hierarchical cluster analysis is used to partition the MDS data hierarchically into non-overlapping clusters.



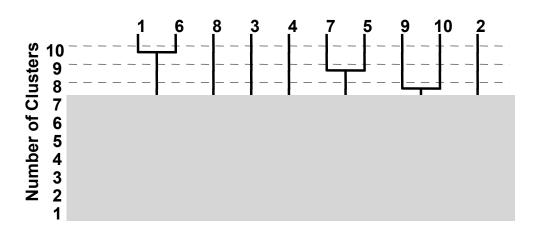


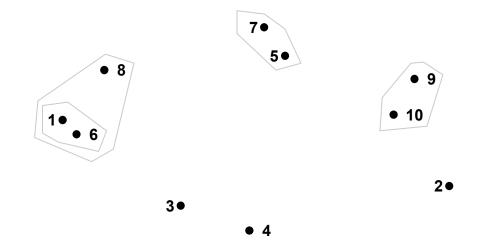




#### Merge Points Merged

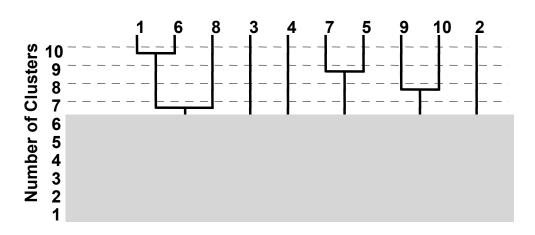
1 1 + 6 2 5 + 7 3 9 + 10

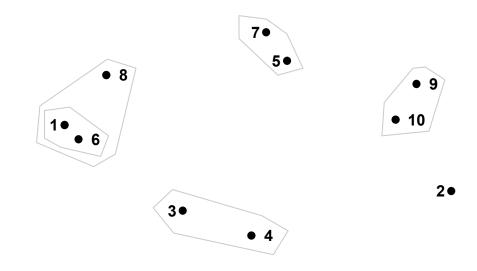




#### Merge Points Merged

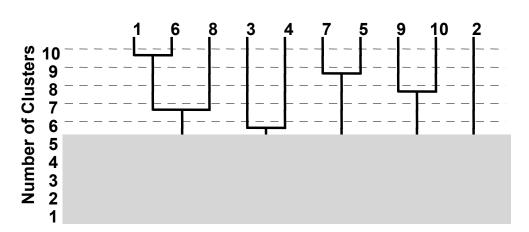
1 1+6 2 5+7 3 9+10 4 (1+6)+8

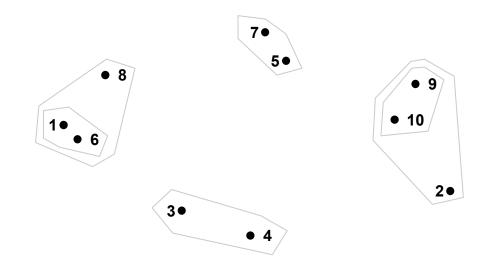




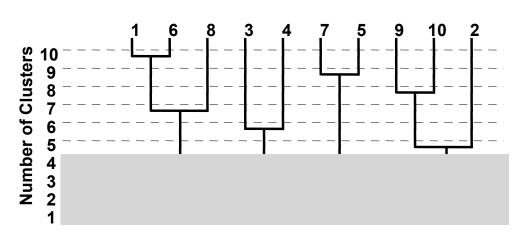
#### Merge Points Merged

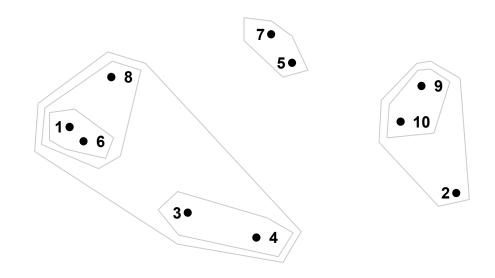
1 1+6 2 5+7 3 9+10 4 (1+6)+8 5 3+4



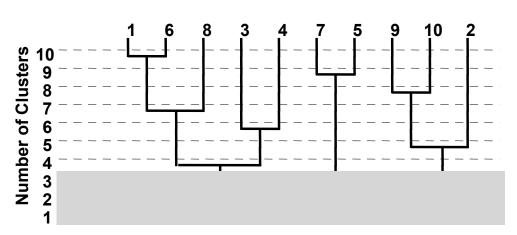


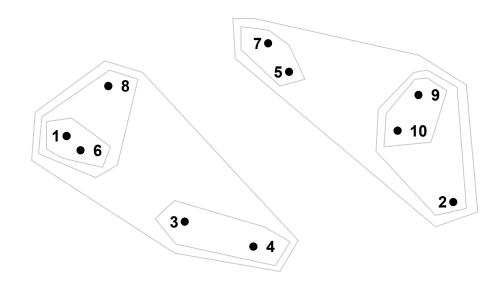
#### Merge Points Merged



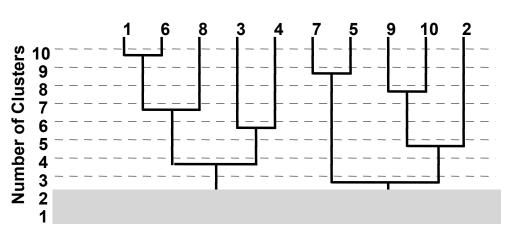


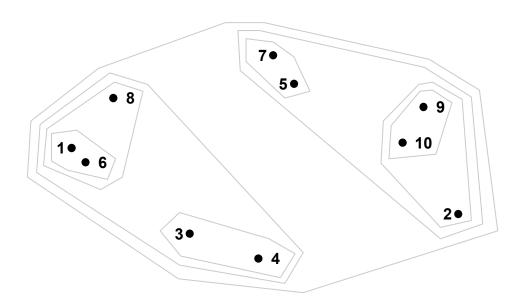
#### Merge Points Merged



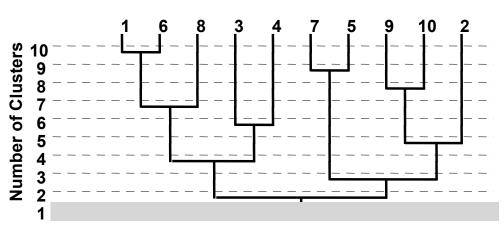


#### **Merge Points Merged**





#### **Merge Points Merged**



### **STUDY SAMPLE**

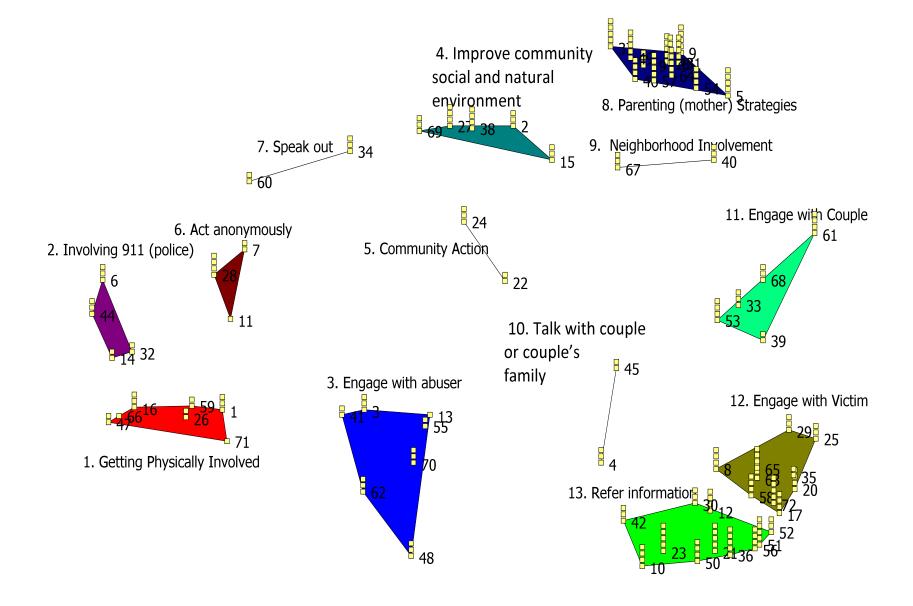
The study sample was almost evenly distributed by sex and age. The majority of sample was Black or Latino; most were born in the US.

	Participant Characteristics					
	Variable	N	%			
Sex	Female	19	46.3			
	Male	22	53.7			
	<= 25	11	26.8			
Λσο	26 - 34	9	22			
Age	35 - 40	11	26.8			
	41+	9	22			
Latino	Not Latino	23	56.1			
	Latino	18	43.9			
Place of Birth	NOT born in US	5	12.2			
	Born in US	36	87.8			
Race	Black/African American	24	58.5			
	Mixed or Other	13	31.7			
	White	1	2.4			
Education	Less than high school	11	26.8			
	GED or higher	30	73.2			
	Not Working	31	75.6			
Employment	Working part or full time	9	22			
Income	Less than \$10,000	8	19.5			
	\$10,000 – 19,999	5	12.2			
	\$20,000 - 39,999	5	12.2			
	Don't Know/Refuse	23	46.1			

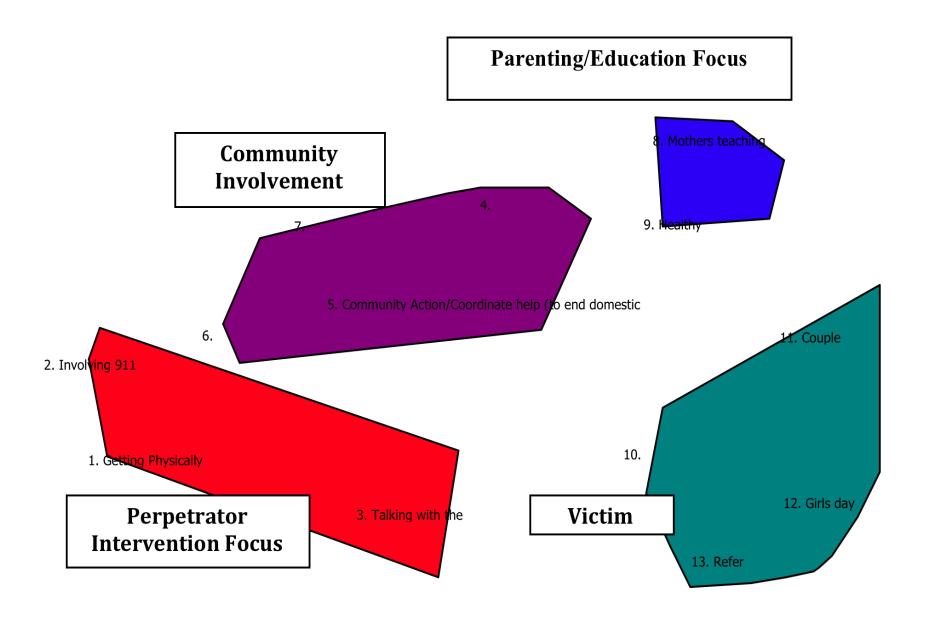
#### **STUDY RESULTS**

- Statements clustered into four main areas
  - actions parenting/education
  - actions focused on the community
  - actions focused on the victim
  - actions focused on the abuser/perpetrator
- The final cluster solution was a 13-cluster solution
- The stress statistic for this solution was acceptable at 0.23 (LT 0.30 indicates stability (Trochim, 1993))
- This map shows the 13-cluster solution

# 13-Cluster Map



# 4-Area Map



#### **EXEMPLARY STATEMENTS FROM 4 DOMAINS**

#### Parenting/Education-focused

- "have workshops or meetings at public schools about domestic violence"
- "moms and kids talk about roles of boys/men in the home and with partners"
- "parents to be more strict with children"

#### Victim-focused

- "refer the woman the hospital/services/counseling"
- "have a girl's day with friends or neighborhood women"
- "serve as a 'healthy couple' example in your own relationship"

#### Perpetrator/Formal systems-focused

- "confront the man before/after the incident"
- "bang on ceiling or pipes"
- "call the police" and "anonymously call 911"

#### Community Involvement-focused

- "leave a note at the door"
- "shame silent bystanders"
- "promote a positive atmosphere in your building"

### **FEASIBILITY SELF RATINGS: 4-AREAS**

Cluster Ratings Descriptive Statistics					
Feasibility for Self					
	N	Minimum	Maximum	Mean	Std.
					Deviation
Parenting/Ed Focus	41	1	5	3.5261	1.22076
Community-					
Involvement Focus	41	1	4.83	3.0305	1.1282
Perpetrator/Formal					
Systems Focus	41	1	4.76	2.8761	1.07755
Victim Focus	41	1	4.96	3.3345	1.20513

1 = Not at all feasible

2 = Not very feasible

3 = Moderately feasible

4 = Very feasible

5 = Extremely feasible

#### FEASIBILITY IPV HISTORY RATINGS: 4-AREAS

Cluster Ratings Descriptive Statistics					
Feasibility if HISTORY of IPV in neighbors' home					
	N	Minimum	Maximum	Mean	Std.
					Deviation
Parenting/Ed Focus	41	1	4.86	3.5836	0.96427
Community-					
Involvement Focus	41	1	4.75	3.0854	0.96041
Perpetrator/Formal					
Systems Focus	41	1	4.84	2.8478	1.09081
Victim Focus	41	1	4.96	3.169	1.13785

1 = Not at all feasible

2 = Not very feasible

3 = Moderately feasible

4 = Very feasible

5 = Extremely feasible

There was no significant difference between general feasibility ratings and feasibility when the couple was perceived to have a history of IPV.

## FEASIBILITY CHILDREN @HOME RATINGS: 4-AREAS

Cluster Ratings Descriptive Statistics					
Feasbility if CHILD is living in neighbors' home					
	N	Minimum	Maximum	Mean	Std.
					Deviation
Parenting/Ed Focus	41	2.64	5	4.1394	0.72068
Community-					
Involvement Focus	41	2	5	3.8069	0.77671
Perpetrator/Formal					
Systems Focus	41	1.64	4.96	3.5668	0.90385
Victim Focus	41	1.36	5	4.0052	0.80593

1 = Not at all feasible

2 = Not very feasible

3 = Moderately feasible

4 = Very feasible

5 = Extremely feasible

Feasibility to act when a child is involved was rated significantly higher than general feasibility (3.89 vs. 3.20; t-statistic=-4.29, p<.01).

## **EFFECTIVENESS RATINGS: 4-AREAS**

Cluster Ratings Descriptive Statistics					
Perceived EFFECTIVENESS of strategies					
	N	Minimum	Maximum	Mean	Std.
					Deviation
Parenting/Ed Focus	41	1.64	5	3.8728	0.7624
Community-					
Involvement Focus	41	1.58	5	3.378	0.86021
Perpetrator/Formal					
Systems Focus	41	1.04	5	3.1307	0.91939
Victim Focus	41	1.25	5	3.5932	0.9071

- 1 = Extremely **ineffective**
- 2 = Moderately **ineffective**
- 3 = Somewhat effective
- 4 = Very effective
- 5 = Extremely effective

#### FEASIBILITY RATINGS: MODIFYING FACTORS

- Feasibility to act when a child is involved was rated significantly higher than general feasibility (3.89 vs. 3.20; tstatistic=-4.29, p<.01).</li>
- Mean scores by cluster were also higher for feasibility when a child is involved, as compared with general feasibility.
- There was no significant difference between general feasibility ratings and feasibility when the couple was perceived to have a history of IPV.

#### FEASIBILITY RATINGS: MODIFYING FACTORS

- Women rated intervention in IPV as more feasible than men (x=3.57 vs. 2.89; t-statistic=2.19, p<.05) overall; and when the couple was perceived to have a history of IPV (x=3.47 vs. 2.91; t-statistic=2.09, p<.05).
- Those w/o high school degree rated both feasibility and effectiveness significantly lower when a child was present than those with a GED+ (x=3.45 vs. 4.05; t-statistic=-2.67, p<. 05 and x=3.08 vs. 3.65; t-statistic=-2.34, p<.05).</li>
- Participants not born in the US rated general feasibility as significantly higher than US-born participants (x=3.86 vs. 3.11; t-statistic=3.39, p<01).</li>
- No other mean differences in ratings were found by other sociodemographic factors.

#### FEASIBILITY RATINGS: MODIFYING FACTORS

- Participants who reported ever being a victim or perpetrator of IPV rated feasibility lower than those reporting never being victimized or perpetrating, but the difference was not statistically significant.
- The difference in effectiveness was statistically significant for victims vs. non-victims (x=3.18 vs. 3.75; t-statistic=2.59, p<.05), with non-victims perceiving all strategies on average as nearly "very effective", whereas victims perceived them as only "moderately effective".
- Participants reporting IPV victimization also rated parent-focused strategies significantly lower (3.59 vs. 4.10; t=2.19, p<.05), as well as community-focused (2.96 vs. 3.71; t=2.94, p<.01), and perpetrator-focused (2.71 vs. 3.44; t=2.63, p<.05), as compared with non-victims.

• Strategies focused on the perpetrator were rated the lowest in terms of both feasibility and effectiveness, consistent with our previous research.

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• Parent and education-focused area was rated the highest in terms of feasibility and effectiveness regardless of mitigating circumstances.

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• Feasibility rated lower given history of IPV for perpetratorfocused strategies, based on a valid fear of engaging with a violent individual.

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 No significant differences between general feasibility and feasibility when "history of IPV" exists.

- Participants rated feasibility to intervene significantly higher when they thought a child was involved.
- Consistent with Fledderjohann & Johnson's (2012) framework, neighbors may feel their responsibility to act, or the gravity of the situation, is much greater when a child is involved, whereas privacy norms and norms of non-intervention persist when it is "just" a couple (Fledderjohann & Johnson, 2012).
- Similarly, norms of tolerance of IPV that underlie general unwillingness to act may be weakened when the "victim" is a child as well as a woman.
- Both victim- and situation-level characteristics, as well as perceived social norms, have been found to influence the "public justification" of IPV that supports the prevalence of violence (Waltermauer, 2012).

### **CONCLUSIONS**

- A wide range of bystander behaviors exist.
- More research needed to develop measures of bystander intervention specific to IPV among adults in a community context.
- Average feasibility and effectiveness ratings never neared "extremely" feasible or effective.
- Contextual factors influence perceived feasibility of intervention behavior.

#### **CONCLUSIONS**

- Developing IPV bystander intervention programs for adults in the neighborhood context requires understanding of these factors.
- Concept mapping an effective research method for developing grounded understanding of social processes that occur at the group level and via social interaction.
- Practical applications of these results can be developed in the US, similar to the Bell Bajao "Ring the Bell" Campaign.
- Develop using true stories of neighbors who "did something" to prevent a female neighbor from experiencing domestic violence, taking context into account.

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