Community-based Participatory Methods in Women’s Health Research: Engaging Partner Violence Perpetrators Through Concept Mapping

Charvonne N. Holliday, PhD, MPH
Postdoctoral Fellow
Population, Family and Reproductive Health

February 1, 2017
1. Review the prevalence and health significance of intimate partner violence (IPV)

2. Provide an overview of our concept mapping methodology, including recruitment and retention strategies

3. Share preliminary results and potential implications

4. Discuss areas for strengthening and building
More than 1/3 (35.6%) of U.S. women have experienced some form of IPV in her lifetime
  - Physical violence (32.9%)
  - Stalking (10.7%)
  - Rape (9.4%)

IPV is associated with:
  - Unwanted pregnancy
  - HIV acquisition
  - Toxic stress and impaired immunity
  - Depression

(Black et al, 2010; Garcia-Linares et al, 2004; Campbell, 2002)
REPRODUCTIVE COERCION

- **Reproductive Coercion**— pregnancy coercion and birth control sabotage

  - 1/10 women in the U.S. has been raped by an intimate partner

  - 1/6 women in the U.S. has experienced sexual violence from intimate partner, including sexual coercion (9.8%).

  - Women who experience IPV and reproductive coercion are 2x as likely to have an unintended pregnancy

(Miller et al. 2010; Black et al., 2011)
**Pregnancy Coercion/Condom Refusal**

“He [used condoms] when we first started, and then he would fight with me over it, and he would just stop [using condoms] completely, and didn’t care. **He got me pregnant on purpose, and then he wanted me to get an abortion.**” —A 16-year-old female

**Birth Control Sabotage**

“I was on the birth control, and I was still taking it, and **he ended up getting mad and flushing it down the toilet**, so I ended up getting pregnant. I found out that [before this] he talked to my friends and he told them that we were starting a family. I didn’t know that. I didn’t want to start a family. I wanted to finish school.” —A 17-year-old female

(Miller et al. 2007)
Racial/Ethnic Differences in Reproductive Coercion, Intimate Partner Violence, and Unintended Pregnancy

Holliday et al., 2017 (In press, Journal of Women’s Health)
REPRODUCTIVE COERCION: HOW DO WOMEN DIFFER?

- White: 18%
- Black: 37%
- Hispanic/Latina: 24%
- Multiracial: 29%
- API/Other: 14%

*p* < 0.001
## HOW DO BLACK AND WHITE WOMEN DIFFER?

### Race-specific Effects of Reproductive Coercion on Risk for Unintended Pregnancy

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>AOR (95 % CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>2.06 (1.45-2.93)</td>
</tr>
<tr>
<td>Black</td>
<td>1.72 (1.14-2.60)</td>
</tr>
<tr>
<td>Hispanic/Latina</td>
<td>0.98 (0.47-2.06)</td>
</tr>
<tr>
<td>Multiracial</td>
<td>1.83 (0.56-5.92)</td>
</tr>
<tr>
<td>Asian/Pacific Islander/other</td>
<td>1.20 (0.67-2.14)</td>
</tr>
</tbody>
</table>

*Adjusted for age, education, relationship status, country of origin, and IPV.
IMPLICATIONS

- Factors outside of our research may be contributing to racial/ethnic differences in reproductive coercion.
- Men have a tremendous role in women’s health outcomes
- The perspectives of men (i.e., understanding, motives) is less understood
- A greater understanding of men’s IPV/RC behavior is a necessary next step
Concept Mapping: Engaging Urban Men to Understand Community Influences on Partner Violence

Holliday et al., 2017 (in progress)
Male perpetration of IPV is influenced by a number of socio-ecological factors:

- Men who perpetrate violence are more likely to abuse substances, have poor mental health, and to be sexually promiscuous and engage in other risky behaviors.
- IPV perpetration is associated with witnessing violence.
- Social acceptance of IPV.

(Decker, 2009; Okuda, 2015; Reed et al., 2009; Raj et al., 2006; Singh, 2014; Fleming, 2015)
MIXED METHODS STUDY USING CONCEPT MAPPING AND IN-DEPTH INTERVIEWS

Phase 1. Brainstorming

Phase 2. Sorting & Rating

Phase 3. Interpretation

Part 1: Concept Mapping

Part 2: Interviews

Part 2: Interviews

Phase 4. Semi-structured Interviews
WHAT IS CONCEPT MAPPING?

“Concept Mapping is a methodology that creates a stakeholder-authored visual geography of ideas from many communities of interest, combined with specific analysis and data interpretation methods, to produce maps that can be used to guide planning and evaluation efforts on the issues that matter to the group.”

(Kane & Trochim, 2007)
METHODS: COMMUNITY PARTNERSHIP

Gateway Project: Abuse Intervention Program

- Abuse intervention for men
  - Weekly 90 minute sessions
  - 22 week program
    - Stage 1
    - Stage 2
- Small group setting
- Co-facilitated by a man and woman
METHODS: RECRUITMENT

We recruited men:

- 18 years and older
- Residents of Baltimore City or Baltimore County
- English speaking
- Current participant in an abuse intervention program (AIP)
102 men approached in small intervention groups (n=11) → 17 men declined flyer (17%) → 44 men expressed Interest (44%) → Phase I 21 men participated → Phase II 24 men participated → Phase III 16 men participated

- 57% were retained in at least 2 phases.
- Total n=28

**Participation in Phase 2 was not dependent on Phase 1 participation**
Recruitment challenges include:
- Group consensus
- Participants’ mistrust in research
- Lack of participant resources (e.g., transportation, childcare, phone service)
- Difficulty following-up to schedule data collection sessions

Elements that facilitated recruitment include:
- Group consensus
- Support from the partnering organization
- Flexibility of research methods and communication
- Rapport building supported by the community organization
- Use of participant-preferred communication (text messages and/or phone)
### WHO PARTICIPATED IN CONCEPT MAPPING?

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>20-29</td>
<td>45.8%</td>
</tr>
<tr>
<td>30-39</td>
<td>29.2%</td>
</tr>
<tr>
<td>40-49</td>
<td>16.7%</td>
</tr>
<tr>
<td>50 and older</td>
<td>8.3%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4.2%</td>
</tr>
<tr>
<td>Black</td>
<td>87.5%</td>
</tr>
<tr>
<td>Other</td>
<td>8.3%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>33.3%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>37.5%</td>
</tr>
<tr>
<td>Some college</td>
<td>12.5%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>16.7%</td>
</tr>
<tr>
<td><strong>Relationship Status</strong></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>58.3%</td>
</tr>
<tr>
<td>Married</td>
<td>8.3%</td>
</tr>
<tr>
<td>Serious relationship (not married)</td>
<td>20.8%</td>
</tr>
<tr>
<td>Dating more than one person</td>
<td>12.5%</td>
</tr>
<tr>
<td>Divorced</td>
<td>8.3%</td>
</tr>
</tbody>
</table>
Focus Prompt

- List things about your community, good or bad, that could cause an abusive situation between a man and his intimate partner or prevent one from happening.
Phase 1. Brainstorming

Focus Prompt
- List things about your community, good or bad, that could cause an abusive situation between a man and his intimate partner or prevent one from happening.
METHODS: BRAINSTORMING

- We held 8 brainstorming sessions (n=21; average n=3; range=1 to 7)
- We generated 328 statements

Analysis:
- Statements were hand-sorted into categories
- Duplicate statements were removed; similar statements were condensed
- A team of three reviewed the items critically. Less-relevant statements were removed with group consensus
WHAT DID THE MEN SAY?

A total of 78 items were used during sorting and rating.
Phase 2. Sorting & Rating
EXAMPLE: SORTING
EXAMPLE: SORTING

Yellow Fruits and Vegetables

Orange Fruits

Green Vegetables
EXAMPLE: SORTING

Cylindrical Foods

Circular Foods

Amorphous Foods
METHODS: SORTING

- We held 9 sorting/rating sessions (n=24; average n=3; range n=1-6)

- Rules for sorting
  - All cards had to be sorted
  - Number of piles should range between 6-20
  - Miscellaneous pile prohibited

- Phase 2 summary
  - Average 11 piles per participants (Range of 4-25 piles)
Rating Statements

Rating 1: IPV Perpetration
• “Please rate on a scale from 1 to 5 how each item is related to a man perpetrating or initiating violence against an intimate partner”

Rating 2: Stress
• “Please rate on a scale from 1 to 5 how each item is related to social stressors/unrest that a man experiences”
METHODS: RATING

Because of this item, it is **very unlikely** that a man will be involved in an abusive situation with his intimate partner.

Neutral — neither likely nor unlikely

Because of this item, a man is **very likely** to be involved in an abusive situation with his intimate partner.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>1. Community centers for youth</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>2. <em>Not having a father figure</em></td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>3. Having access to activities that relieve stress (e.g., boxing and other sports, restaurants, etc.)</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>4. Neighborhood has abandoned houses and dirty streets</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>5. A shortage of programs that teach about healthy relationships</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>6. Lack of money for food, children's needs, etc.</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>7. Lack of access to mental health, medical care, or counseling</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>8. Having community resources (e.g., Yo Baltimore, Safe Streets, Living Classroom)</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
<td>9. Having no plan for the future/no vision</td>
</tr>
</tbody>
</table>
Phase 3. Interpretation
RESULTS: CLUSTER MAP

1. Challenging Partnerships
2. Good Support System
3. Social Influence
4. No Hope for the Future
5. Building Community's Foundation
6. Negative Community Characteristics
7. Socioeconomic Struggles
RESULTS: PATTERN MATCH

![Graph showing relationships between IPV Perpetration and Stress]
RESULTS: SOCIO-ECOLOGICAL PERSPECTIVE OF CLUSTERS

Intra/Inter-personal Factors

1. Challenging Partnerships
2. Good Support System
3. Social Influence

Community Factors

5. Building Community’s Foundation

Inter-personal Factors

4. No Hope for the Future

Proximal Factors

Distal Factors

6. Negative Community Characteristics
7. Socioeconomic Struggles
“My sisters, they used to just tell me that girls will lie to you…and they would say, "Even if a girl hits you, don't hit a girl back." I honestly never went with that rule, because it was like, I would allow a female to hit me multiple times, but it's a point where though enough is enough. That's with anybody. I just felt, though, it shouldn't be like no rule. In my own opinion, like if a female hit a dude, a dude should not necessarily beat the female down. I'm just saying, if a dude is grabbing a female in a certain way, or defend himself, and jack up, or push her away, it shouldn't be a consequence for that. If you really harm the female, like brutally, then that's a different story, but it's just uneven, in my opinion.”

-Black man, age 24
WHAT DID MEN SAY ABOUT PARTNER VIOLENCE AND REPRODUCTIVE COERCION?

- “I remember watching my homeboy sit there and put holes in the condom. I'm like ‘What the f*** is you doing, yo?’ – ‘Nah, boy! That's gonna be my baby mama. I'm telling you shorty, she nice, boy.’ – Black man, 29 years old
  - "I'm going to say Halle Berry- "I'm going to get Halle Berry pregnant. She got money, she pretty." – Black man, 36 years old

- “Just because they say no, I believe it doesn't necessarily mean it's no. It's just like no, but you can take it. That's what I think….I feel as though being in a relationship, the consent came with the relationship. That's just me. I could be wrong but that's just how I feel. – Black man, 37 years old

- “I ain't wearing no condom. I don't care what you say. ‘Well, if you ain't gone wear one then don't …’ Eh, whatever. You ain't about to tell me none of that. Nuh-uh (negative). You got your tubes tied right? You got your tubes tied for a reason. Do you want to see my medical records because I can bring all that shit to you. You want to see it? I'll give it to you. Not a problem. But I'm not wearing no damned condom. I'm sorry." – Black man, 29 years old
TAKE-HOME POINTS

- Men can be engaged in group-based and individual research as perpetrators of IPV.

- We identified attributes of the Baltimore city environment that contribute to or prevent incidents of IPV:
  - Factors span all levels of the sociological model, with community factors more positively ranked.

- No hope for the future (Cluster 4), which included factors around negative childhood experiences, hopelessness, and poor interpersonal relationships, was highly ranked in regards to IPV perpetration and stress that men experience.

- Grey areas exist in men’s perception of abuse, particularly reproductive coercion.
LIMITATIONS

- Purposive sampling
- Homogenous sample
- Potential participant fatigue
- Low literacy
- Time constraints
STUDY IMPLICATIONS

- **Policy**
  - Inform methods for proper adjudication of male perpetrators of IPV
  - Reduce recidivism of perpetrators of IPV
  - Address encumbering social concerns

- **Practice**
  - Highlights areas of appropriate intervention
  - Establish additional programming around healthy relationships, particularly for youth
  - Strengthen additional AIPs
“If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions.”

Albert Einstein
NEXT STEPS FOR RESEARCH

- Extending the work to include a more diverse sample of men
- Learning how to engage individuals with low literacy in concept mapping exercises
- Continuing community partnering and use of community-based participatory research methods
- Exploring perpetration of sexual (forced sex) and reproductive (birth control sabotage/pregnancy coercion) forms of partner violence from the male perspective
- ......
ACKNOWLEDGEMENTS

- **Partnership**
  - House of Ruth Maryland, Gateway Project

- **Research Support**
  - Sophie Morse
  - Dr. Nate Irvin

- **Mentorship**
  - Dr. Michele Decker
  - Dr. Cynthia Minkovitz
  - Dr. Donna Strobino
  - Dr. Jackie Campbell

- **Funding**
  - Johns Hopkins University Urban Health Institute (PI: C. Holliday)
  - Health Resources and Services Administration (T76MC00003; PI: D. Strobino and C. Minkovitz)
  - National Institute of Child Health and Human Development (T32HD064428-05; PI: J. Campbell)
REFERENCES


QUESTIONS AND COMMENTS

Charvonne N. Holliday, PhD, MPH
Postdoctoral Fellow, Department of Population, Family & Reproductive Health
Johns Hopkins Bloomberg School of Public Health
615 N. Wolfe Street, E4143
Baltimore, MD 21205
Office: 410-614-3362
chollid4@jhu.edu
1. Challenging partnerships
   12 Trust issues in intimate relationships
   16 Being labeled as an abuser
   34 One partner makes more money than the other
   35 Negative family influence that causes conflict
   45 Feeling powerless or voiceless
   48 Differences in sexual expectations between partners
   62 Cheating on partner
   66 Acceptance of intimate partner violence
   72 Inability to provide for family
2. Good support system

23 Social standards (going to college, marriage, buying a home)
24 Having open family talks
30 Positive influence by friends/peers
31 Feelings of hope
32 Positive support from parents/parents teaching right from wrong
44 Positive family influence
49 Positive family activities in the community (e.g., community cookouts)
69 People support one another
3. Social Influence

10 Reality T.V.
25 Religious beliefs
38 Perceived racism
39 Partners have different opinions about issues in the community
46 Lack of positive parent role models
60 Porn
65 Social Media (e.g., Facebook, Snapchat, Instagram)
74 Idolizing/looking up to lifestyles or images presented in the media
4. No hope for the future

2  Not having a father figure
9  Having no plan for the future/no vision
11 Feeling frustrated from life experiences (anger)
14 Not having a family
18 No knowledge of how to treat an intimate partner
28 Lack of outlets or ways to cope with issues
37 Not experiencing love as a child
50 One or both partners use drugs
51 Negative childhood experiences
54 Fear of stopping violence
55 Major stress (e.g., physical, mental, emotional stress)
56 Seeing domestic violence during childhood
58 Feeling like everyone is out to get you
61 Most people want to be a hood star
63 Negative influence by friends/peers that causes conflict
70 Music makes bad things sound acceptable (e.g., disrespect of women, killing)
73 Not caring for self or others
5. Building a community foundation

1. Community centers for youth
3. Having access to activities that relieve stress (e.g., boxing and other sports, restaurants, etc.)
5. A shortage of programs that teach about healthy relationships
8. Having community resources (e.g., Yo Baltimore, Safe Streets, Living Classroom)
13. Community teaches lack of respect for self and other gender
19. Blocks getting news houses
22. What one experiences in the Baltimore County environment (e.g., Towson)
26. Having neighborhood stores
27. Positive mentors for youth
67. Some cops are good
6. Negative community characteristics

4 Neighborhood has abandoned houses and dirty streets
7 Lack of access to mental health, medical care, or counseling
20 A lot of drugs/alcohol available in the community
21 Jealous people in my community
33 Bad school system
43 Unsafe neighborhoods
47 A lot of killings/violence in my community
52 A lot of guns are available
53 Kids don't have anything to do
57 Lack of job opportunities
71 People are used to seeing violence in the community
76 Beefing between Black brothers (men)
77 What one experiences in the Baltimore City environment
78 Lack of community resources (e.g., re-entry programs, schools, community centers)
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7. Socioeconomic struggles</strong></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lack of money for food, children's needs, etc.</td>
</tr>
<tr>
<td>15</td>
<td>Incarceration of male figures</td>
</tr>
<tr>
<td>17</td>
<td>Hustling to get money</td>
</tr>
<tr>
<td>29</td>
<td>Lack of access to a lawyer of choice</td>
</tr>
<tr>
<td>36</td>
<td>Strict sentencing in Maryland</td>
</tr>
<tr>
<td>40</td>
<td>Lack of trust in police</td>
</tr>
<tr>
<td>41</td>
<td>The negative effects of lead poisoning</td>
</tr>
<tr>
<td>42</td>
<td>Abuse or fear of abuse from police officers</td>
</tr>
<tr>
<td>59</td>
<td>Reputation of aggression in Baltimore</td>
</tr>
<tr>
<td>64</td>
<td>Anger/tension experienced by community members and police from current issues in community</td>
</tr>
<tr>
<td>68</td>
<td>Police do what they want (i.e., illegal stopping and searching)</td>
</tr>
<tr>
<td>75</td>
<td>Dealing drugs</td>
</tr>
</tbody>
</table>
RESULTS: CLUSTER RATING MAP--RATING 1, IPV PERPETRATION

Cluster Legend
Layer Value
1 2.15 to 2.54
2 2.54 to 2.93
3 2.93 to 3.32
4 3.32 to 3.71
5 3.71 to 4.10

1. Building Community's Foundation (2.59)
2. Social Influence (3.53)
3. Good Support System (2.15)
4. Negative Community Characteristics (3.81)
5. Socioeconomic Struggles (3.50)
6. No Hope for the Future (4.10)
7. Challenging Partnerships (3.85)
RESULTS: CLUSTER RATING MAP--RATING 2, MALE STRESS

Cluster Legend
Layer | Value
1 | 2.32 to 2.73
2 | 2.73 to 3.14
3 | 3.14 to 3.55
4 | 3.55 to 3.96
5 | 3.96 to 4.38

1. Building Community's Foundation (2.82)
2. Social Influence (3.65)
3. Good Support System (2.32)
4. Negative Community Characteristics (4.36)
5. Socioeconomic Struggles (4.38)
6. No Hope for the Future (4.35)
7. Challenging Partnerships (4.22)

Drop or move to supplemental if people can get here, great.
Final Stress is 0.2517 after 9 iterations. Filter is 'no filter'.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Bridging</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Building a Community Foundation</td>
<td>0.33</td>
</tr>
<tr>
<td>2. Social Influence</td>
<td>0.43</td>
</tr>
<tr>
<td>3. Good support system</td>
<td>0.34</td>
</tr>
<tr>
<td>4. Negative Community Characteristics</td>
<td>0.09</td>
</tr>
<tr>
<td>5. Socioeconomic Struggles</td>
<td>0.22</td>
</tr>
<tr>
<td>6. No hope for the future</td>
<td>0.27</td>
</tr>
<tr>
<td>7. Challenging Partnerships</td>
<td>0.67</td>
</tr>
</tbody>
</table>
Bridging = 0
20. A lot of drugs/alcohol available in the community

Bridging = 0
34. One partner makes more money than the other

Bridging = 1
Prompt
List all of the things about your community, good or bad, that are related to an abusive situation between a man and his intimate partner.

Definitions
Community: area where you work, live, and socialize

Intimate partner: spouse, girlfriend/boyfriend, dating partner, lover, sex partner, baby’s mother

Abuse: Physical, emotional, or sexual/reproductive abuse, stalking, or threatening harm.

- **Physical:** choking, shaking, hitting or other physical force that could cause harm
- **Emotional:** isolating the person from family and friend, denying basic needs (i.e., money or food), humiliation.
- **Sexual/Reproductive:** forced or pressured sex, intentionally trying to get a woman pregnant against her will (i.e., removing the condom during sex, poking holes in the condom), destroying birth control, threatening to leave if she doesn’t get pregnant
- **Threats:** Threatening harm with words, gestures, or weapons.
BACKGROUND

*Inclusive of forced

Dashed lines and shaded circles indicate relationships and variables not presented and discussed in this brief review.

(Campbell et al., 2013)
BACKGROUND

- Racial/ethnic disparities in IPV, and women’s sexual/reproductive health
- Social influence on toxic stress and sexual assault

Gap: Men are rarely engaged in IPV research
RECRUITMENT AND RETENTION TIMELINE

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started Phase I Recruitment</td>
<td>June 23rd, 2016</td>
</tr>
<tr>
<td>Phase I Data Collection</td>
<td>June 27th - July 21st, 2016</td>
</tr>
<tr>
<td>Phase I Data Analysis</td>
<td>July 22nd - August 3rd</td>
</tr>
<tr>
<td>Phase II Data Collection</td>
<td>August 3rd - August 31st</td>
</tr>
<tr>
<td>Phase II Data Analysis</td>
<td>September 5 - September 7</td>
</tr>
<tr>
<td>Phase III Data Collection</td>
<td>September 12th</td>
</tr>
</tbody>
</table>

JUNE    JULY    AUGUST    SEPTEMBER
RESULTS: AGE OF PARTICIPANTS

- 20-29: 45.8%
- 30-39: 29.2%
- 40-49: 16.7%
- 50+: 8.3%
- Other: 0.0%
RESULTS: RACE OF PARTICIPANTS

- White: 4.2%
- Black: 87.5%
- Other: 8.3%
RESULTS: EMPLOYMENT STATUS

- Student: 4.2%
- Employed: 70.8%
- Unemployed/Disabled: 25.0%
RESULTS: LEVEL OF EDUCATION

- 33.3% Some High School
- 37.5% High School Graduate
- 2.5% Some College
- 29.2% College Graduate
RESULTS: RELATIONSHIP STATUS

- Single: 58.3%
- Married: 8.3%
- Serious relationship (not married): 20.8%
- Dating more than one person: 12.5%
- Divorced: 8.3%
RESULTS: STAGE IN INTERVENTION

- **Stage 1**: 20.8%
- **Stage 2**: 75.0%
- **N/A**: 4.2%
RESULTS: TYPE OF PARTNER VIOLENCE PERPETRATED

Type of Perpetrated Abuse

- Hit, slapped, kicked, etc.: 54.2%
- Grabbed, shook, slammed: 54.2%
- Insulted/swore: 70.8%
RESULTS: USE OF REPRODUCTIVE COERCION

- Made partner have sex without a condom or removed condom during sex
- Used deception to get partner pregnant

- Made partner have sex without a condom or removed condom during sex: 0.0%
- Used deception to get partner pregnant: 8.3%
### Logistic regression models assessing associations of race, reproductive coercion, and intimate partner violence with unintended pregnancy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 AOR (95% CI)</th>
<th>Model 2 AOR (95% CI)</th>
<th>Model 3 AOR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (n=283)</td>
<td>Reference</td>
<td>Reference</td>
<td>Reference</td>
</tr>
<tr>
<td>Black (n=342)</td>
<td><strong>1.76 (1.09-2.82)</strong></td>
<td><strong>1.63 (1.02-2.60)</strong></td>
<td><strong>1.67 (0.99-2.80)</strong></td>
</tr>
<tr>
<td>Hispanic/Latina (n=361)</td>
<td>1.12 (0.67-1.86)</td>
<td>1.08 (0.65-1.79)</td>
<td>1.09 (0.66-1.82)</td>
</tr>
<tr>
<td>Multiracial (n=89)</td>
<td>1.44 (0.85-2.45)</td>
<td>1.37 (0.79-2.38)</td>
<td>1.35 (0.78-2.34)</td>
</tr>
<tr>
<td>API/other (n=158)</td>
<td><strong>1.42 (1.13-1.79)</strong></td>
<td><strong>1.41 (1.15-1.73)</strong></td>
<td><strong>1.43 (1.13-1.80)</strong></td>
</tr>
<tr>
<td><strong>Reproductive Coercion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (n=914)</td>
<td>---</td>
<td>Reference</td>
<td>Reference</td>
</tr>
<tr>
<td>Yes (n=320)</td>
<td>---</td>
<td><strong>1.59 (1.26-2.01)</strong></td>
<td><strong>1.47 (1.05-2.05)</strong></td>
</tr>
<tr>
<td><strong>Intimate Partner Violence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (n=568)</td>
<td>---</td>
<td>---</td>
<td>Reference</td>
</tr>
<tr>
<td>Yes (n=666)</td>
<td>---</td>
<td>---</td>
<td><strong>1.38 (0.77-2.48)</strong></td>
</tr>
</tbody>
</table>

Model 1 = Adjusted for age, education, relationship status, and country of origin
Model 2 = Model 1 + reproductive coercion
Model 3 = Model 2 + intimate partner violence
<table>
<thead>
<tr>
<th>Phase</th>
<th>Recruited (n)</th>
<th>Participated (n)</th>
<th>Retained from previous phases (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brainstorming</td>
<td>35</td>
<td>21</td>
<td>---</td>
</tr>
<tr>
<td>2. Sorting &amp; Rating</td>
<td>33</td>
<td>24</td>
<td>17 (71%)</td>
</tr>
<tr>
<td>3. Interpretation</td>
<td>Ongoing</td>
<td>3</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

**Participation in Phase 2 was not dependent on Phase 1 participation**
METHODS: IN-DEPTH INTERVIEWS

Part 2

Phase 4.
Semi-structured Interviews

- We will recruit men from an AIP (n~25)
- Mixed-methods sequential design
- Life-course perspective