

Concept mapping as a tool to develop CBPR Infrastructure: The 3C example



Liliane Windsor

Lillian Harris Professor of Social Work
Associate dean for Research and Doctoral Education



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Agenda

- Define CBPR and contextualize the early formative research conducted to develop the 3C
- Define concept mapping and its utility to CBPR
- Demonstrate the application of concept mapping to create the foundation for the 3C
- Key findings and implications for CBPR infrastructure development



The Critical Consciousness Collaborative 3C)

Locations:
Illinois, New Jersey, New York

Methodological Frameworks:
CBPR & MOST

2010

Theoretical Framework:
Critical Consciousness Theory
Intersectionality

Promote Health Equity in
Disinvested Communities

Community Based Participatory Research



What is concept mapping?

- An approach to obtain data that preserves individual views while identifying the essence of group views.
- Uses a concept map as a “visual representation of how different ideas are related to each other. Ideas that are located close together on the map are closely related in meaning, and ideas that are farther apart are considered to be less related in meaning.
- Useful to develop measure items or as a planning tool for groups.
- Facilitates understanding and communication between diverse groups



Steps in Concept Mapping

STEP 1 1. Brainstorming



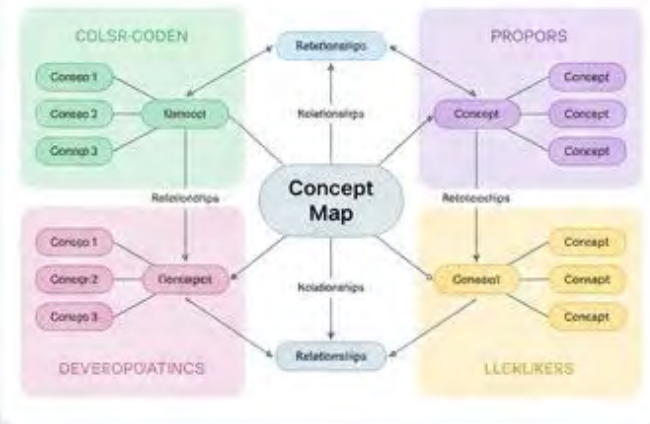
STEP 2 Sort & Rate



3. Analyze



4. Results



4 Step
Concept Mapping
Workflow

Applications

- Organizational development and strategic planning
- Needs Assessment
- Development of standardized measures
- Curriculum and theory development
- Evaluation
- See [Concept Systems](#) for more information - specifically groupwisdom



Research Challenge

- New to Newark
- Needed to meet people in the community
- Needed to gain community trust
- Needed to systematically understand substance abuse in the community and its complexities



Methods

- Institutional Review Board approval
- The research team in consultation with community members identified potential participants and developed the prompt:
- “What is the role of drugs and alcohol in Newark’s distressed neighborhoods?”



Steps in Concept Mapping

STEP 1 1. Brainstorming



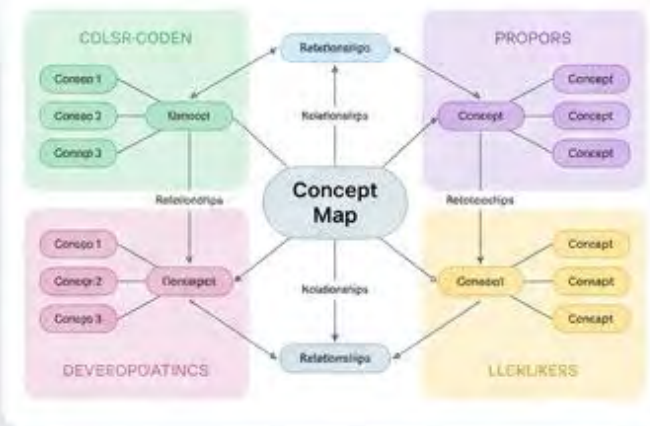
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4 Step
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Brainstorming

Three brainstorming sessions:

- Substance users
 - Community members
 - Service providers
-
- Used three independent people working with Microsoft Word to combine the lists, delete redundant items, and edit for clarity
 - Produced final list of 100 statements



Sorting and Rating

3 sort/rate sessions:

- Substance users
- Community members
- Service providers

Sorted and rated each statement according to participants' agreement on a five-point scale from completely disagree (1) to completely agree (5).



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Steps in Concept Mapping

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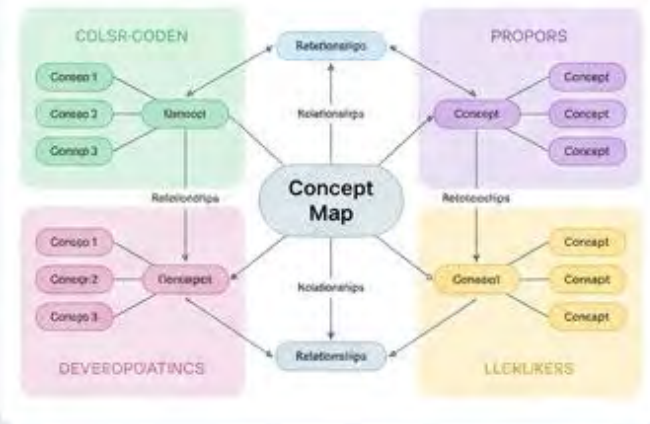
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Map Analysis

- Multi-dimensional scaling: counts how many times statements were sorted together by participants and place them in the map. The closer the statements are to one another, the more times they were sorted together.
- Hierarchical cluster analysis is used to draw the boundaries of each cluster



Ratings Analysis

- Ratings are then analyzed and can be compared with a correlation score based on demographic characteristics. Ratings are represented by layers in each dimension.
- Interpretation: New set of participants (community members, service providers, and people with living/lived experience) interpret the map and name the different dimensions.



Comparative Analysis

Pattern Matching: A visual and simple way to compare different ratings based on demographic characteristics

Go-Zone: Scatter plot that allows one to examine how different groups rated items in a cluster

Program can run t-test to assess statistical significance



Complementary Focus Group

Participants were asked to discuss substance abuse treatment programs in the community, including their strengths and weaknesses; community needs; and the role of the community in service provision and advocacy.



Concept Mapping Strengths

- Structured approach with a recipe
- Mixed methods approach
- Wide applicability
- Successfully used in a variety of research projects
- Successfully funded by NIH
- Great to engage diverse groups in dialogue
- One software does it all



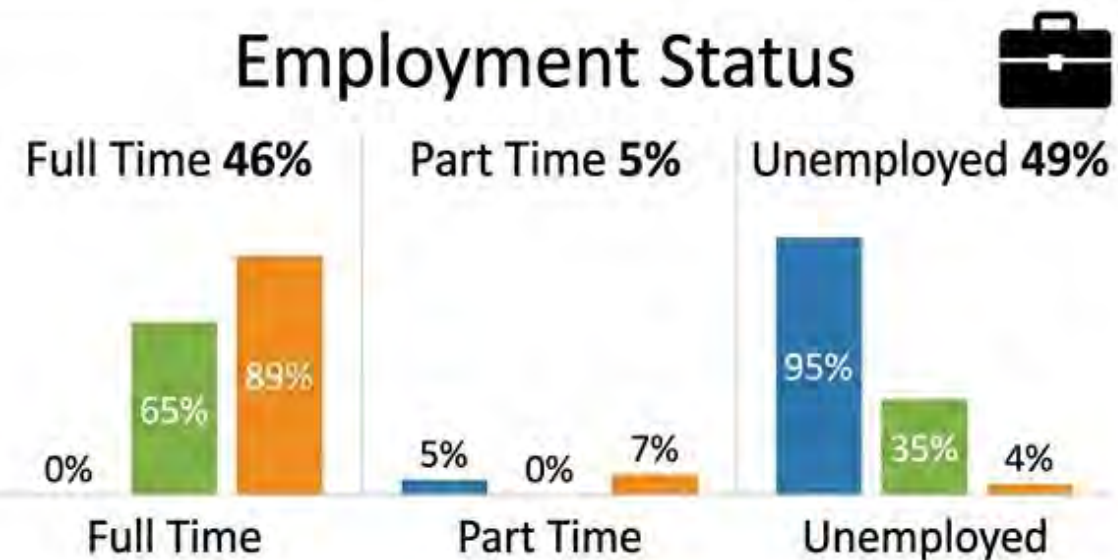
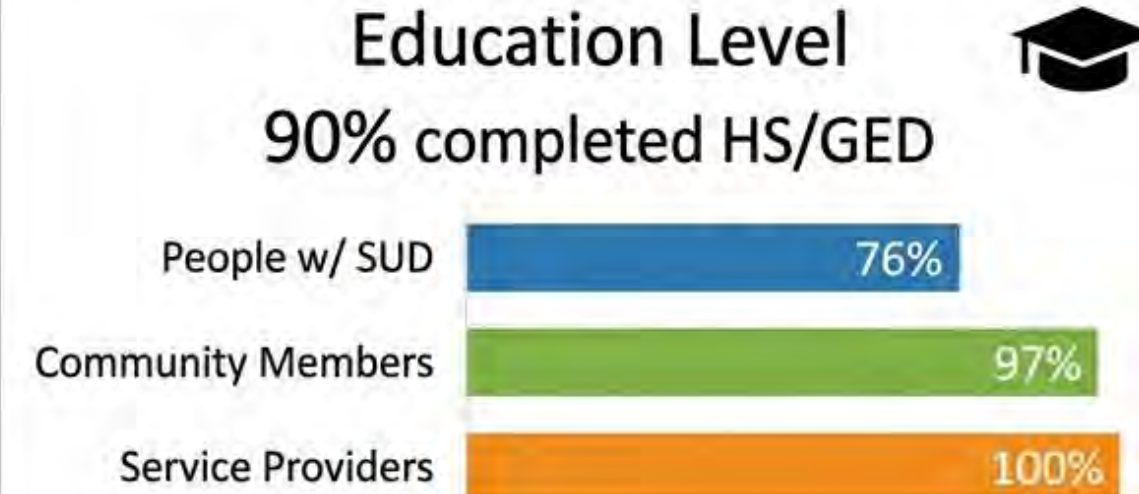
Concept Mapping: Limitations

- Often lacks generalizability
- Better for program evaluations or pilot projects
- Can be expensive as each project requires one license
- Lacks the depth of qualitative approaches



Demographics

Study Demographics Overview



Gender - Female

58% overall

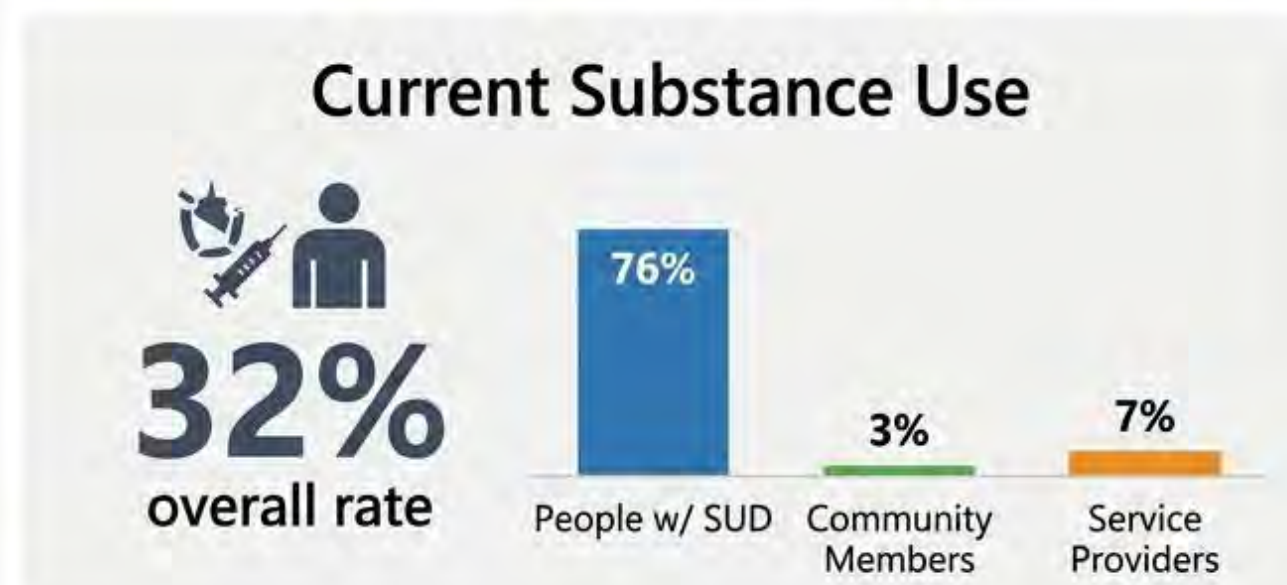
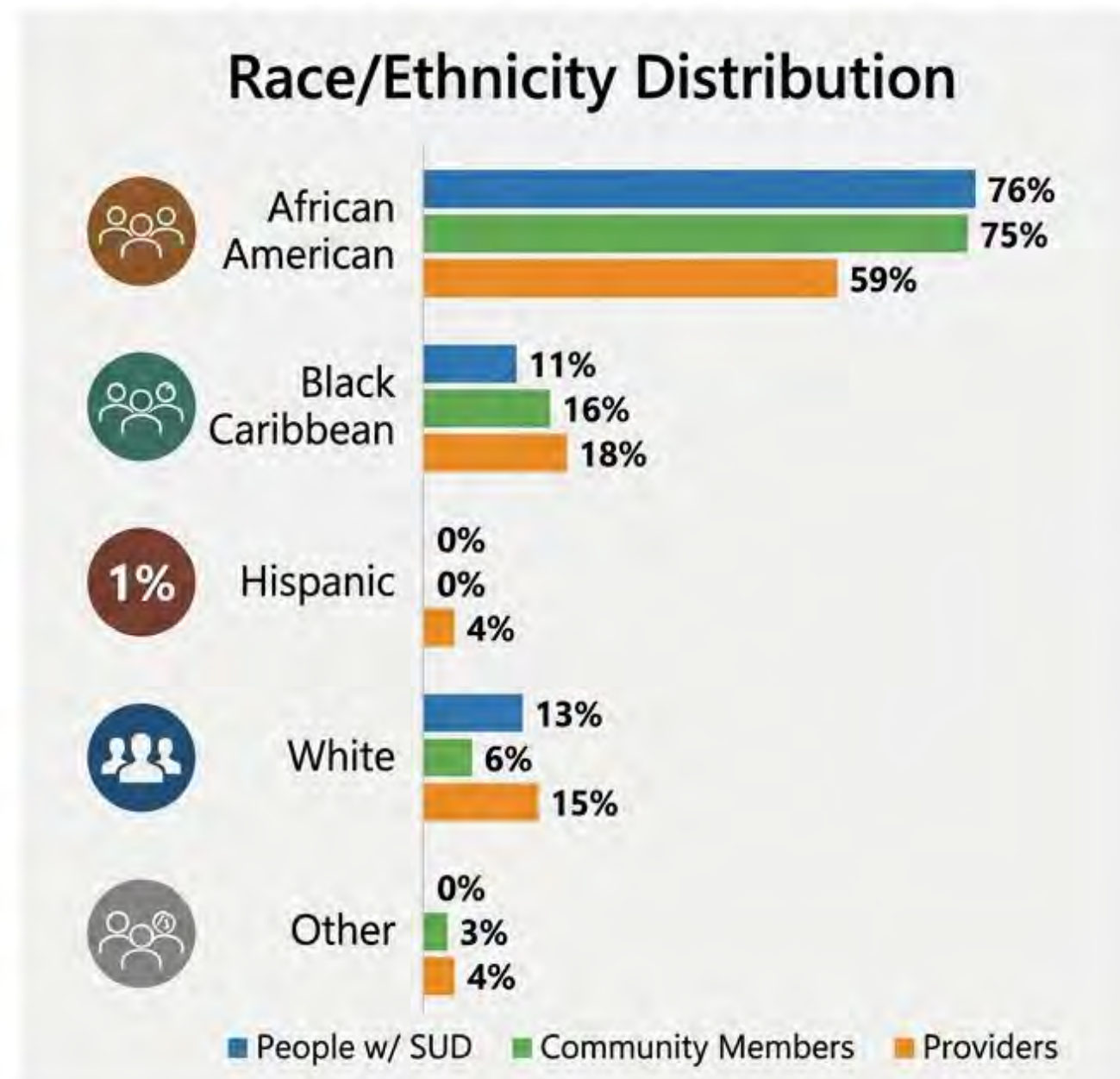
People w/ SUD 53%

Community Members 64%

Service Providers 59%

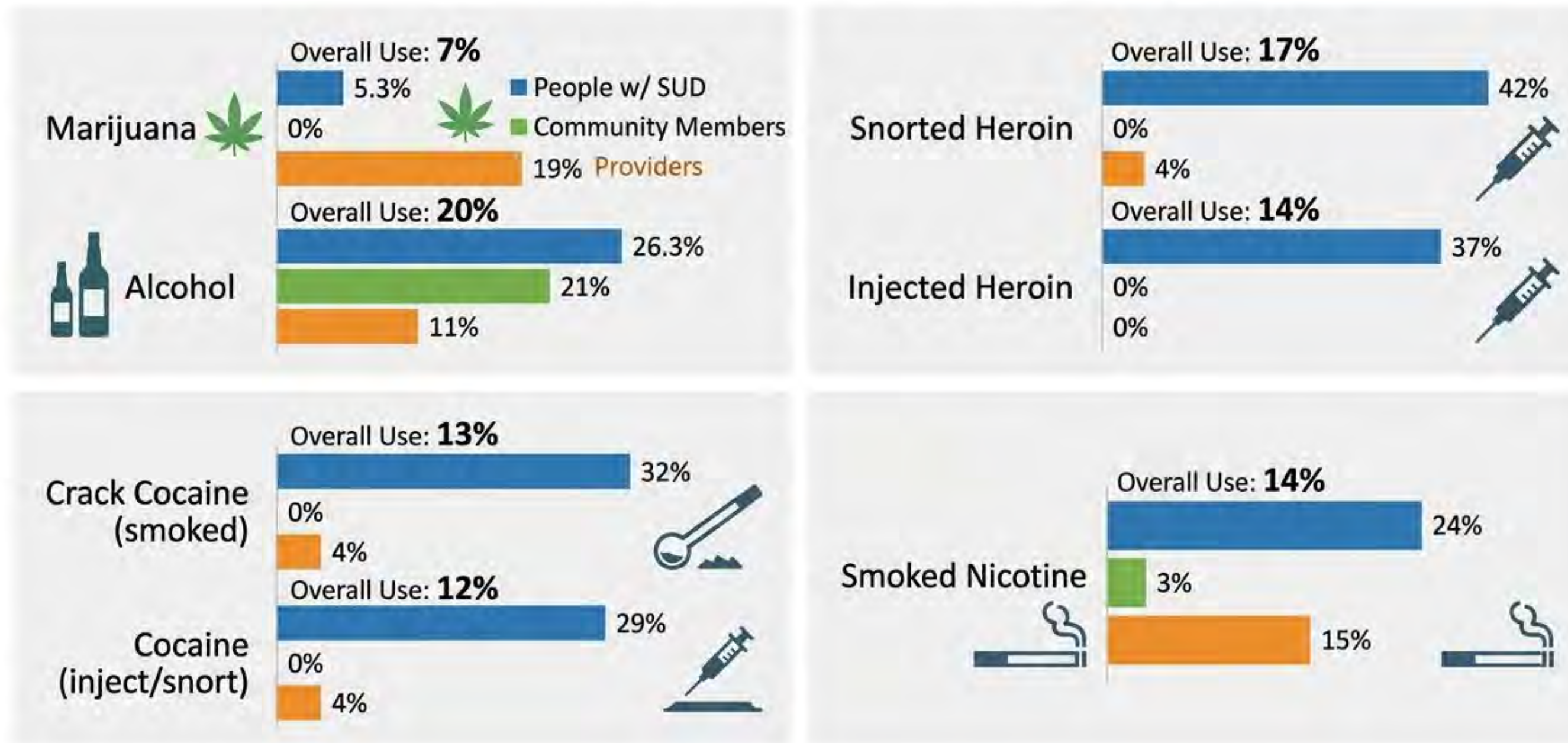
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Study Demographics Overview

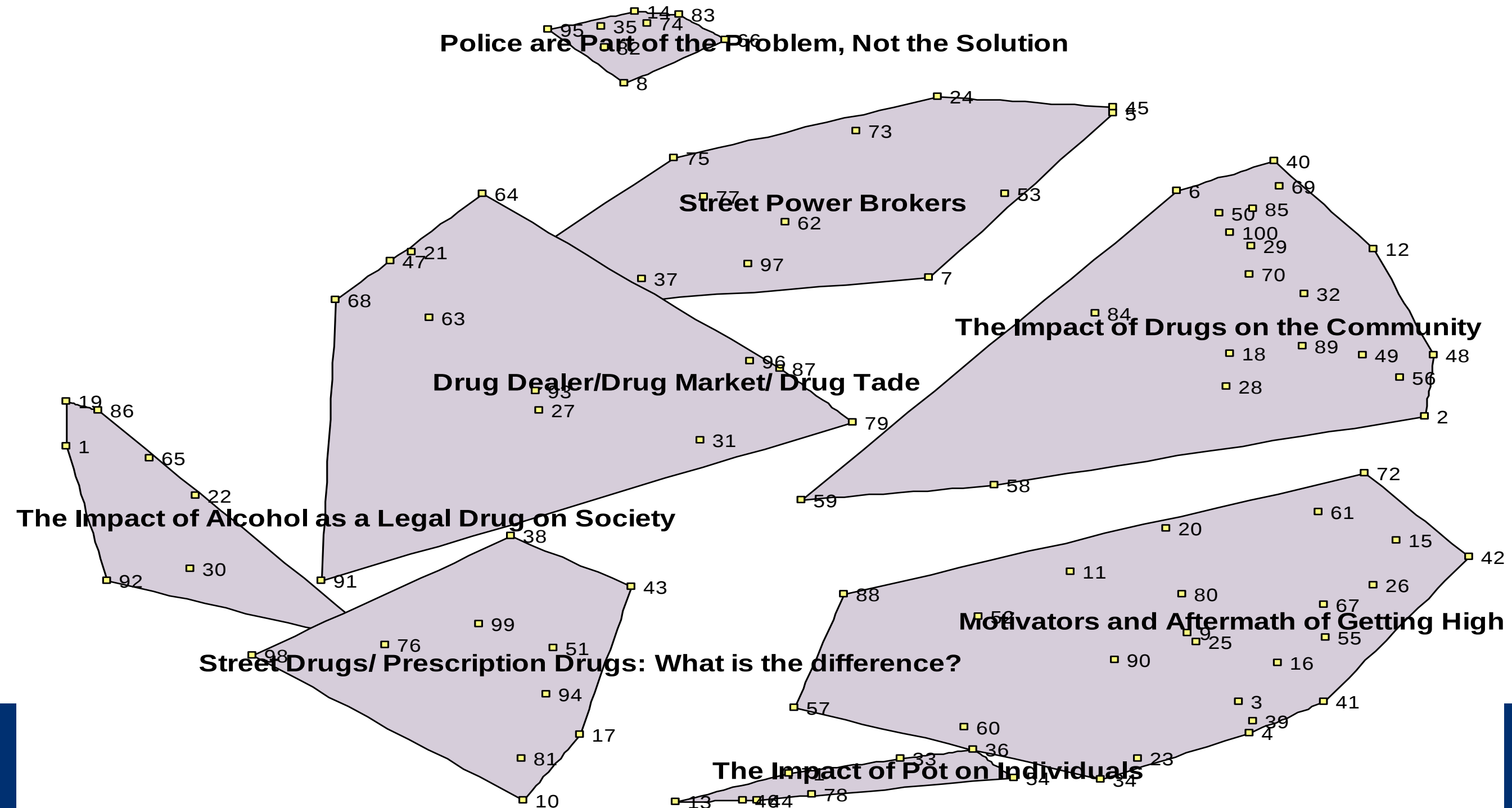


Demographics

Current Substance Use by Type



Concept Map



“Impact of alcohol as a legal drug in society”

- Reflects the negative consequences of alcohol in the community as a substance that is prevalent.
- Participants explained that alcohol is so prevalent that it has become normalized in the community; while many deny its negative consequences such as increased HIV risk behaviors and poor parenting.
- Participants also noted they would like to see many fewer liquor stores in their communities.



“Street drugs/ prescription drugs: What’s the difference?”

- Participants believe that pharmaceutical companies are “legalized drug dealers”.
- Prescription drugs are typically preferred over illegal drugs because they are safer and less likely to produce severe withdrawal symptoms. However heroin and other illegal drugs are cheaper.
- Youngsters prefer “huffing” (using inhalants) and smoking “leak” (marijuana cigarettes dipped on embalming fluid)



“The impact of pot on individuals”

- Some people argued that marijuana is a gateway drug and that individuals who justify their marijuana use are in denial and in need of treatment. Marijuana is a harmful drug that should be banned from the community.
- Some service providers and people w/ SUD argued that marijuana contributes to a reduction in crime because it relaxes its users. Marijuana has positive medical uses and therefore is not a threat to the community.



“Street Power Brokers”

Refers to the main players in Newark’s distressed neighborhoods’ drug trade:

- People selling drugs
- Vulnerable youth
- The police
- Politicians
- Business owners
- Corrupt churches



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“Police are part of the problem, not the solution”

- Reflects the distrust of the community of the Newark police.
- Most participants were suspicious of the police and all groups used the expression: “the cops are the biggest gang out there”.
- Participants believed the police serve privileged communities, apply racial profiling and maintain the drug trade in poor neighborhoods, away from Newark’s wealthier neighborhoods.



“Drug dealers/ drug market/ drug trade”

- Referred to the actual dynamics of drug dealing in Newark’s distressed neighborhoods.
- Participants discussed the broken promises of drug dealing and the “flashy” lifestyle explaining that young children are lured into the trade by expensive jewelry and “easy cash”.
- Drug dealing was discussed as an important part of the informal economy



“Impact of drugs on the community”

- Participants talked about their experiences of being exposed to drug violence including witnessing shootings, being interrogated by the police, being afraid to go to certain areas at certain times and being scared for their children.
- Participants discussed the disadvantages that impoverished families must face when living in drug infested communities.



“Motivators and aftermath of getting high”

Discusses the reasons why people in Newark’s distressed neighborhoods use drugs, the consequences of such drug use on individuals’ lives, and the group differences among people who use specific drugs.”



Focus Groups

- Substance Abuse Treatment Programs: Strengths and Weaknesses
- Barriers to Substance Abuse Treatment
- Structural Issues: Individual versus Social Responsibility in Recovery
- Proposed Solutions



Establishing the 3C (Former Newark Community Collaborative Board-NCCB)

The NCCB was created with a great deal of effort to ensure that both researchers and community members engaged in dialogue and conducted the entire research process together, from problem formulation to intervention testing and analysis.



Recruitment

- Made contacts in needs assessment
- Mailing list, word of mouth
- Invited applications
- Mixer for all who were interested
- Mutual interviews at mixer
- Interviewer ratings submitted
- PI & research team selected top 30 for membership
- 5 invited to attend meeting as guests



Starting the NCCB

First meeting in October 2010

Mission statement:

“The mission of the NCCB is to advocate for and empower individuals with a history of substance use issues who are transitioning from incarceration into Newark’s communities through community engagement, critical thinking, and civic participation.”



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Establishing the NCCB

- Memorandum of Understanding
- Subcommittee to draft and revise
- 2 years of revisions
- By-laws formally adopted in August 2012
- Membership = 10 to 20



Step 2: Training the NCCCB

9 sessions:

Criminal justice system; CCT; Community Reentry in Newark; Substance Abuse Modalities; Substance Abuse Treatment in Newark; Role of Drugs & Alcohol in Newark; CBPR; Grant Writing & Funding; Manual Development

Trainers: Board members, outside experts

Data collection: Pre/post tests, survey, video



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Step 3: Conducting Business

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Thank you!

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Equity. Innovation. Transformation.



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