Developing the Measurement Approaches to Partnership Success (MAPS) Questionnaire: A Mixed Methods Approach*

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Presented at the American Public Health Association Annual Meeting; Philadelphia, Pennsylvania; November 5, 2019

*With acknowledgement to the National Institute of Nursing Research (Grant #RO1NRO16123), and our colleagues in the Detroit Urban Research Center.
Presenter Disclosure

Barbara A. Israel & Angela G. Reyes (Co-Presenters)

The following personal financial relationships with commercial interests relevant to this presentation existed in the past twelve (12) months.

NO RELATIONSHIPS TO DISCLOSE
Detroit Community-Academic Urban Research Center

A community-based participatory research partnership (CBPR) working to improve the health and well-being of Detroit residents and to promote health equity by:

- Enhancing understanding of the relationship between the social and physical environmental determinants of health; and
- Translating that knowledge into public health interventions, programs, and policies that build upon community resources and strengths.
Detroit URC: 24 Years of CBPR Partnership
Measurement Approaches to Partnership Success (MAPS) Study

**Specific Aim 1**
Clearly define CBPR partnership success and develop a tool (MAPS) to assess partnership success.

**Specific Aim 2**
Test the psychometric qualities of the MAPS tool.

**Specific Aim 3**
Develop mechanisms to feedback and apply partnership evaluation findings and widely disseminate.
Mixed Methods Research: Definitions

- A research approach in which a researcher **collects, analyzes, and integrates both qualitative and quantitative data** within a single study or program of inquiry.

- A research paradigm that **intentionally** combines or integrates multiple methods of inquiry and analysis – both quantitative and qualitative – to draw on the **strengths of each**.

- …to better understand complex phenomena.

*Handbook of Mixed Methods in Social & Behavioral Research; Encyclopedia of Research Design (Pinto); Creswell & Plano Clark (2011).*
When and Why Use Mixed Methods in CBPR?

- Values both “objective” and “subjective” knowing
- Strengths of each single method combined to give fuller understanding
- Integration and comparison
Designing a Mixed Methods Study

- Based on theoretical framework and research question.

**Exploratory Sequential Design**
- Qualitative Data Collection and Analysis
- Quantitative Data Collection and Analysis

**Explanatory Sequential Design**
- Quantitative Data Collection and Analysis
- Qualitative Data Collection and Analysis

**Convergent Design**
- Qualitative Data Collection and Analysis
- Quantitative Data Collection and Analysis

- Compare or relate
- Integration

*A Concise Introduction to Mixed Methods Research, Creswell, J. 2015*
Key Informant Interviews (n=21)
Conducted with MAPS Expert Panel (n=16) and Pilot Respondents (n=5)

Literature Review
- Scoping Review
- Knowledge of Experts
- Comparison with Existing Measures

Synthesis
of interview findings and literature to develop the draft questionnaire

Draft Questionnaire

Delphi Process
with Expert Panel (n=16)
Construct, Face, and Content Validity

Delphi Round 1
(Online)

Delphi Round 2
(Online)

Delphi Round 3
(Face-to-Face)

Cognitive Interviews (n=6)
Face Validity

Pilot Survey (n=7)
Face Validity

Fielding of Final Questionnaire

Revised Questionnaire 1

Revised Questionnaire 2

Revised Questionnaire 3

Semi-Final Draft of Questionnaire

Final Draft of Questionnaire

Figure 2: Methodology to Develop MAPS Questionnaire Items
Figure 3: MAPS Mixed Methods Design

Exploratory Sequential
Step 1

- Qualitative Key Informant Interviews
- Quantitative Questionnaire Development

Convergent Design
Step 2 (3 Rounds)

- Qualitative Delphi
- Quantitative Delphi
- Revised Questionnaire

Step 3

- Qualitative Cognitive Interviews
- Quantitative Cognitive Interviews
- Revised Questionnaire

Step 4

- Qualitative Pilot Survey
- Quantitative Pilot Survey
- Final Questionnaire
Results: Seven Dimensions of Success in Longstanding CBPR Partnerships Identified and Defined

- Equity in the Partnership
- Partnership Synergy
- Reciprocity
- Competence Enhancement
- Sustainability
- Realization of Benefits Over Time
- Achievement of Intermediate and Long-Term Partnership Goals/Outcomes
## Examples of Selected Measures Informed by Mixed Methods

### Measure of Interest: **Partnership Synergy**

<table>
<thead>
<tr>
<th><strong>In Vivo Codes from Key Informant Interviews</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Where you get to is better than either would’ve gotten to alone. Having diverse partners together can accomplish more than could separately. Collaboration among diverse partners helps the partnership accomplish its objectives.</td>
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<tr>
<th><strong>Draft Questionnaire Item for Delphi Process</strong></th>
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<tbody>
<tr>
<td>B-2. Having diverse community and academic partners together accomplishes more than could be accomplished separately.</td>
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<tr>
<th><em><em>Delphi (Rounds 1-3),</em> Cognitive Interviews (CI), Pilot Testing (PT)</em>*</th>
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<tbody>
<tr>
<td>D-R1: Item Deleted</td>
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<tr>
<td>D-R2: Item Reworded, re-added</td>
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<tr>
<th><strong>Final Items in the MAPS Questionnaire</strong></th>
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<td>76. Working together, the partnership accomplishes more than partners could accomplish separately.</td>
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Examples of Selected Measures Informed by Mixed Methods

Measure of Interest: **Equity in the Partnership**

*In Vivo Codes from Key Informant Interviews*

Having real relationships with people from different backgrounds and different perspectives. Number or quality of friendships; increased level of empathy, kindness, and understanding

*Draft Questionnaire Item for Delphi Process*

A-1. There is a dynamic of genuine goodwill (e.g., acceptance, openness, and flexibility) within the partnership.

*Delphi (Rounds 1-3),* Cognitive Interviews (CI), Pilot Testing (PT)*

D-R1: Item Reworded
D-R2: Item Reworded
CI: Item Reworded

*Final Item in the MAPS Questionnaire*

33. There is genuine goodwill (e.g., welcoming and openness) among members of the partnership.
Examples of Selected Measures Informed by Mixed Methods

Measure of Interest: **Competence Enhancement**

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**In Vivo Codes from Key Informant Interviews**

Community partners develop additional leaders, have increased voice and power to advocate change

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**Draft Questionnaire Item for Delphi Process**

D-5. The partnership enhances community partners’ ability to advocate for change in the community.

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**Delphi (Rounds 1-3),* Cognitive Interviews (CI), Pilot Testing, Research Team (RT)**

D-R1: Re-worded & new item added to reflect both the community & academic institutions.

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**Final Items in the MAPS Questionnaire**

64. The partnership enhances partners’ ability to advocate for change in the community.

65. The partnership enhances partners’ ability to advocate for change in academic institutions.
Lessons Learned: Mixed Methods Research and CBPR

- Creates mechanisms for multiple forms of participation from diverse entities
- Builds capacity across multiple methods and designs
- Demonstrates that diverse contributions are valued
- Increases confidence in the results
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