



UNC
CAROLINA
POPULATION
CENTER

The Measurement of Social Capital

Will Story, PhD, MPH

Carolina Population Center

University of North Carolina at Chapel Hill



May 20, 2015

CORE Group Webinar

Outline

- **Define** social capital and **describe** how it is measured
- **Describe** the process of validating social capital survey questions
- **Present** a case study on creating a social capital survey instrument in Bangladesh
- **Provide** insight into social capital survey research in general

Why measure social capital?

- Social capital has been shown to be associated with physical health, mental health, health behaviors, and health care access
- Provides theoretical basis for assessing the impact of community-based health promotion programs
- Lack of evidence linking social capital to health in low-income countries
- Lack of reliable measures that have been validated in low-income countries

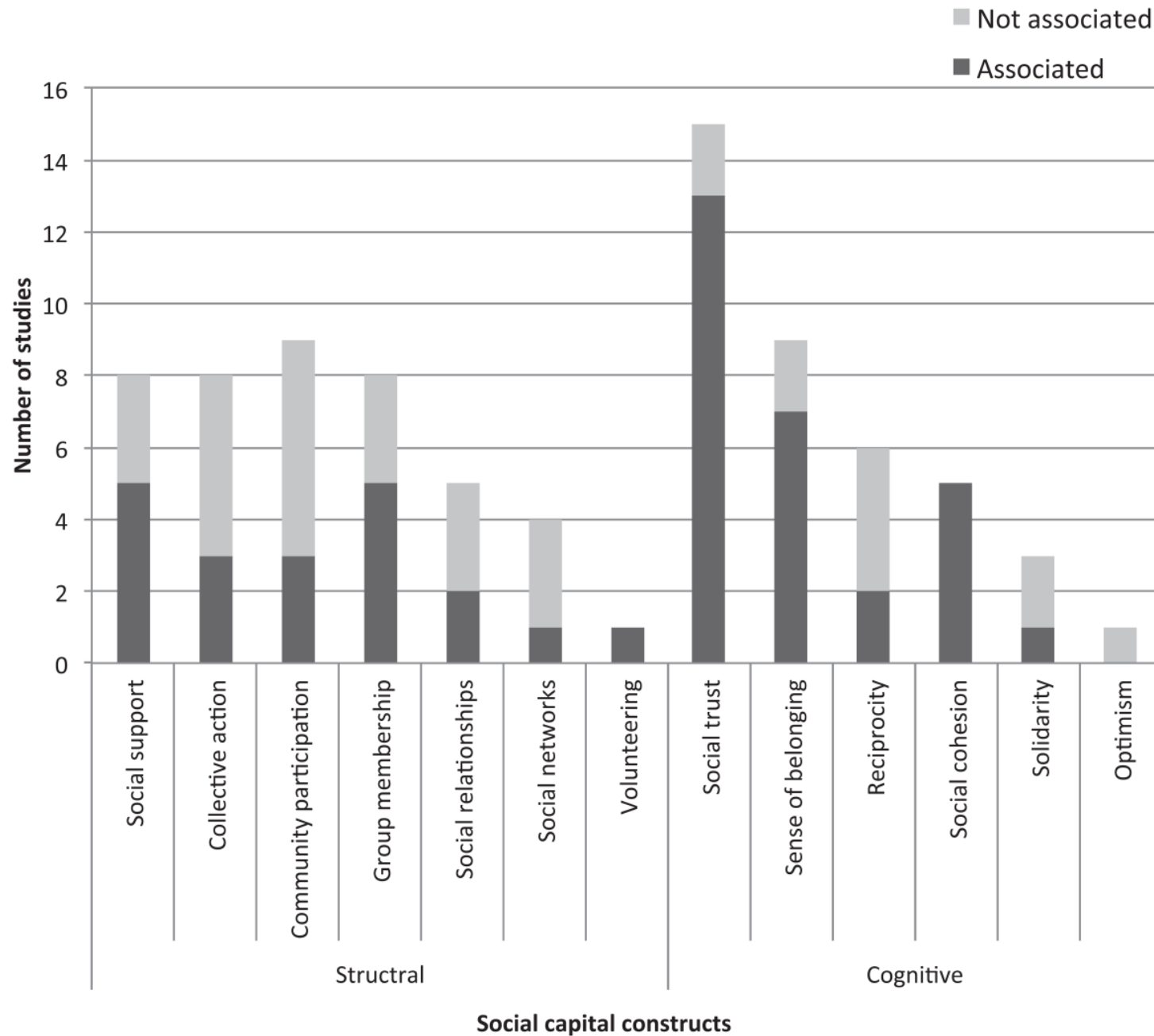
Define social capital and describe how it is measured

What is social capital?

- A broad term including social relationships, networks, and values that facilitate collective action for mutual benefit
- Theories of social capital tend to be dichotomized into two forms: **structural** and **cognitive**
 - ▣ **Structural**: What people **do** as measured by individuals' actions and behaviors
 - ▣ **Cognitive**: How people **feel** as measured by individuals' attitudes and perceptions

How is social capital measured?

- A survey-based approach is commonly used to measure specific components of social capital
- Structural social capital
 - ▣ Group membership/involvement
 - ▣ Informal social relationships
 - ▣ Collective action
- Cognitive social capital
 - ▣ Trust (generalized or interpersonal)
 - ▣ Social cohesion



Describe the process of validating social capital survey questions

The need for validation

- Social capital survey questions can be interpreted differently in different cultural settings
- There is a need to validate the content of social capital survey questions in each cultural setting
- Both quantitative and qualitative methods can be used to validate survey questions

Quantitative validation

- The most common quantitative validation technique is **psychometric validation**
 - ▣ Focuses on discriminant validity
 - ▣ Examines the lack of association among constructs that are supposed to be different
 - ▣ Does not include the respondents' perspective

Qualitative validation

- Common qualitative validation techniques include **expert review**, **focus group discussions**, and **cognitive interviews**
 - ▣ Focuses on content validity
 - ▣ Ensures that a theoretical construct is accurately translated into operational measures
 - ▣ Does not assess whether the tool behaves as it should, given the theory of the construct

Survey question validation process



- **Expert reviews**: Assess whether the survey questions are appropriate for measuring the construct
- **Focus groups**: Explore what people know and the terms they use to talk about the topics covered in the survey
- **Cognitive interviews**: Examine how respondents understand the questions and formulate their answers

Cognitive interviewing (1)

- Systematically examines the question-and-answer process from the respondents' perspective
- Two sub-types of cognitive interviewing: **think-aloud** interviewing and **verbal probing** techniques
- Focuses on four cognitive tasks required to answer a survey question:
 - ▣ Interpretation
 - ▣ Retrieval/recall of information
 - ▣ Judgment formation
 - ▣ Response mapping

Cognitive interviewing (2)

1) Interpretation

- ▣ What does the respondent believe the question to be asking?
- ▣ What do specific words and phrases in the question mean to the respondent?

2) Retrieval/recall of information

- ▣ What types of information does the respondent need to recall in order to answer the question?
- ▣ What type of strategies are used to retrieve information?

Cognitive interviewing (3)

3) Judgment formation

- ▣ Does the respondent devote sufficient mental effort to answer the question accurately and thoughtfully?
- ▣ Does the respondent want to tell the truth? Does he/she say something that makes him/her look "better"?

4) Response mapping

- ▣ Can the respondent match his or her internally generated answer to the response categories given by the survey question?

Present a case study on creating a social capital survey instrument in Bangladesh

Story, W.T., Taleb, F., Ahasan, S.M., & Ali, N.A. (2015).
Validating the measurement of social capital in Bangladesh:
A cognitive approach. *Qualitative Health Research*, 25(6),
806-819.

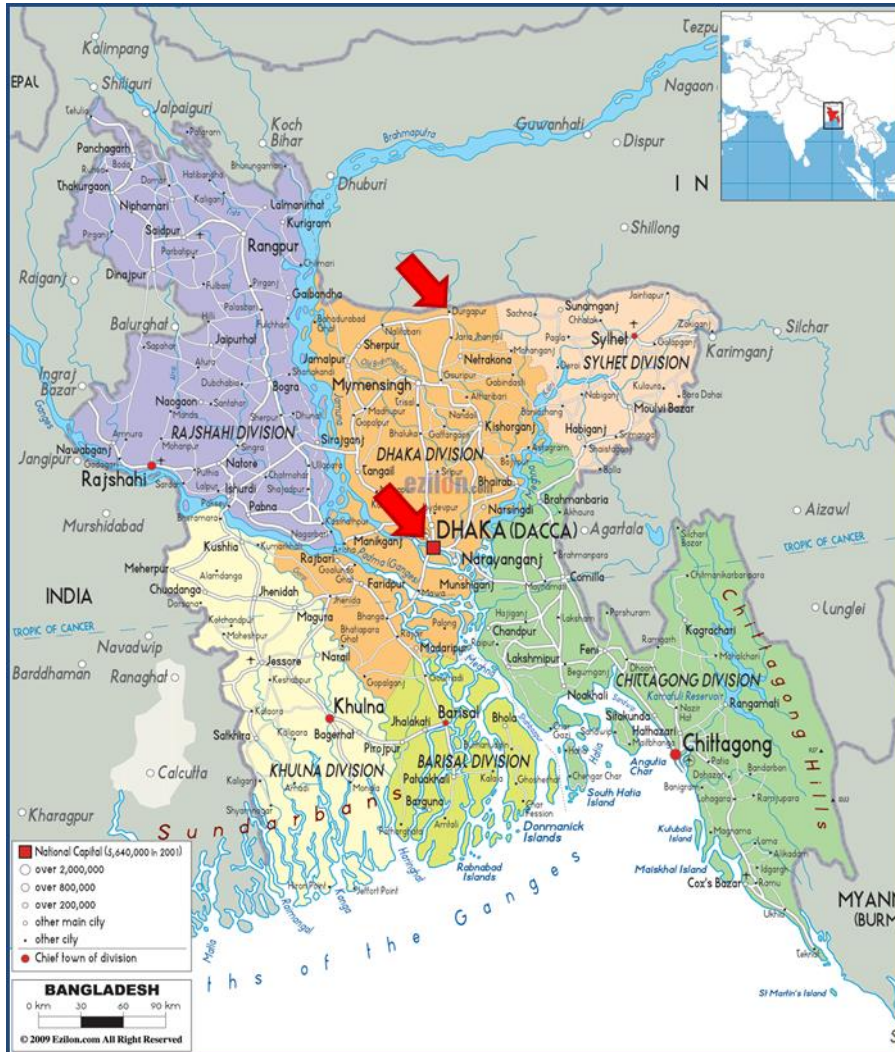
Motivation

- In Bangladesh, many development organizations aspire to improve health and well-being through community-based strategies
- A better understanding of the measurement of social capital in Bangladesh will help elucidate the pathways through which these strategies affect health and health behaviors
- This is the first social capital survey instrument to be cognitively tested in Bangladesh

Study aims

- Examine the content validity of the measurement of social capital used in the shortened and adapted Social Capital Assessment Tool (SASCAT) in an urban and rural setting in Bangladesh
- Propose a newly adapted social capital survey instrument that can be used by future health and development organizations in Bangladesh

Setting



- One rural sub-district (Durgapur) and one urban slum (Mirpur) in Bangladesh
- Selected based on the high rates of poverty, low levels of literacy, and poor infrastructure in each area

Identify
survey
instrument

Expert
reviews

Focus
group
discussions

Cognitive
interviews

Field
pretests

- **Identify survey instrument**: SASCAT
- **Expert reviews**:
 - Suggestions from De Silva and colleagues (2006)
 - Independent review by social capital expert
 - A final review by our research team from ICDDR,B
- **Focus groups**: Four FGDs conducted separately for men and women in the two survey areas
- **Cognitive interviews**: 32 cognitive interviews consisting of 18 structured survey questions followed by scripted verbal probes

Verbal probes (1)

□ Collective Action

■ In the last 12 months, have you talked with a local authority or governmental organization about problems in this area?

■ Probing questions

■ Can you tell me in your own words what the question is asking? (Interpretation)

■ Who do you include when you think of a “local authority or government organization?” (Response mapping)

Verbal probes (2)

□ Trust

- Do you think that the majority of people in this area would try to take advantage of you if they got the chance?
- Probing questions
 - Can you tell me in your own words what the question is asking? (Interpretation)
 - What does the phrase “take advantage of” mean to you as it’s used in this question? (Interpretation)
 - In general, is it okay to talk about this in a survey, or is it uncomfortable? (Judgement formation)

Data analysis

- The expert reviews and FGDs contributed to changes in the survey instrument, including terminology and response options
- Cognitive interviews were transcribed and translated into English
- The transcripts were analyzed in NVivo 10.0 using a deductive approach to thematic analysis
- Codes were developed based on seven categories of problems embedded in survey questions

Changes to the new survey

- Separate the question about group membership into two questions
- Remove all questions about actual support received from groups and individuals
- Retain questions about potential support with both individuals and groups in the response options
- Reframe collective action questions to focus on community development
- Add the response option “sometimes” to questions about trust and social cohesion

Shortened and Adapted Social Capital Assessment Tool-Bangladesh (SASCAT-B)

Group membership

- In the last 12 months, have you been a member of the following types of groups in your area?
- In the last 12 months, how would you describe your involvement in the groups in which you are a member?

Social support

- Suppose you had something unfortunate happen to you, such as a father's sudden death. Who would help you in this situation?
- Suppose you suffered an economic loss, such as job loss (urban)/crop failure (rural). In that situation, who do you think would assist you financially?
- Suppose you are (female)/your wife is (male) preparing to give birth to your (female)/her (male) first child. Who do you think would provide you (female)/her (male) advice or assistance in this situation?

Collective action

- In the last 12 months, have you joined together with others in your area to address important issues?
- In the last 12 months, have you talked with a local leader, chairman, or governmental organization about the development of your area?

Trust

- Can your neighbors be trusted?
- Can leaders in this area be trusted?
- Do you think that the majority of people in this area would try to take advantage of you if they got the chance?

Social cohesion

- Do the majority of people in this area generally have good relationships with each other?
- Do you feel that this area is yours?

Provide insight into social capital survey
research in general

Remaining challenges

- Measuring group membership
- Reframing questions about social support and collective action
- Assessing social trust
- Tailoring the survey instrument to fit the social and political context

Measuring group membership

- Difficult for respondents to answer
- Only asking about “participation” can confuse the number of groups one belongs to with the level of involvement
- **Level of involvement** is an important aspect of social capital that should be carefully measured
- Expands the range of weak ties among individuals and promotes the creation of social trust and norms of reciprocity at the community level

Reframing questions about social support

- Questions were reframed as **potential** sources of support using hypothetical scenarios to avoid possible correlation with negative life events
- Consistent with Bourdieu's theory of social capital
- Can identify disparities in access to each potential source of social capital

Reframing questions about collective action

- If questions focus on community problems, then communities with high levels of collective action might be associated with social divisiveness, which is an indicator of low social capital
- To avoid this potential correlation, use questions that focus on community development

Assessing social trust

- Generalized trust is difficult to measure and can be an inaccurate approximation of relational trust
- There are few individuals who trust everyone or who trust one person completely with respect to all things
- Questions about trust should focus on **interpersonal trust**, which is a better representation of social capital

Tailoring the survey instrument to fit the social and political context

- The microfinance culture in Bangladesh is important to understanding group membership, social support, and trust
- Group-based microfinance is based on self-selected groups of borrowers who are jointly liable for loans
- Borrowers decrease lenders' risk of investment by finding the "right" people to join the group
- Individual's who are excluded from these groups are also denied other types of resources

Conclusions

- To facilitate the interpretation of the effects of complex social constructs on health, it is important to validate survey questions using qualitative methods
- These validation methods led to a social capital survey instrument that can be added to a larger population-based survey in Bangladesh
- As efforts to accurately and reliably measure social capital continue to improve, evidence for the linkage between social capital and health will be strengthened

Acknowledgements

- Co-authors Fahmida Taleb, S.M. Monirul Ahasan, and Nabeel A. Ali at ICDDR,B
- Apurba Ghagra and Catherine Guda at SATHI
- Gabriel Rozario and Prafullo Hajong at PARI Development Trust
- Nancy TenBroek, Kohima Daring, and Silas Sangma at World Renew
- The entire interview team and the respondents in Mirpur and Durgapur, Bangladesh

Thank You

Until June 25th:

Carolina Population Center

University of North Carolina at Chapel Hill

wstory@unc.edu

After June 25th:

Department of Community and Behavioral Health

University of Iowa, College of Public Health

william-story@uiowa.edu