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*Measuring Social Capital:
A Guide for
First Nations Communities*

B Y J A V I E R M I G N O N E



Part of the Canadian Institute for Health Information
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ABOUT THE CANADIAN POPULATION HEALTH INITIATIVE

The mission of the Canadian Population Health Initiative (CPHI) is twofold: to foster a better understanding of factors that affect the health of individuals and communities, and to contribute to the development of policies that reduce inequities and improve the health and well-being of Canadians. A Council of respected researchers and decision-makers from across Canada guides CPHI in this work. CPHI collaborates with researchers, policy makers, the public and other key partners to increase understanding about the determinants of health, with the goal of helping Canadians stay healthy and live longer.

As a key actor in population health, CPHI:

- Provides analysis of Canadian and international population health evidence to inform policies that improve the health of Canadians;
- Funds research and builds research partnerships to enhance understanding of research findings and to promote analysis of strategies that improve population health;
- Synthesizes evidence about policy experiences, analyzes evidence on the effectiveness of policy initiatives and develops policy options;
- Works to improve public knowledge and understanding of the determinants that affect individual and community health and well-being; and
- Works within the Canadian Institute for Health Information to contribute to improvements in Canada's health system and the health of Canadians.

Under the guidance of the CPHI Council, Aboriginal People's health was identified in 2001 as one of three initial priority areas for policy analysis.

ABOUT THE CENTRE FOR ABORIGINAL HEALTH RESEARCH

The Centre for Aboriginal Health Research (CAHR) is a joint initiative of the Assembly of Manitoba Chiefs, the Faculty of Medicine at the University of Manitoba, and the Foundations for Health. The CAHR was established through a generous contribution from the Assembly of Manitoba Chiefs to the fundraising campaign of the Foundations for Health for the construction of the Buhler Centre for Health Research. Development of the CAHR was also facilitated by a research infrastructure grant awarded to the University of Manitoba by the Canadian Foundation for Innovation and the Manitoba Innovation Fund. Operating funds have been awarded by the Canadian Institutes for Health Research and the Social Science and Humanities Research Council.

The CAHR initiates, coordinates and supports research activities designed to assist First Nations and Aboriginal communities and organizations in their efforts to promote healing, wellness and improved health services in their communities. The research program integrates scientific and traditional Aboriginal approaches to producing new knowledge about health and health care in First Nations and Aboriginal communities.

INTRODUCTION

Why are some First Nations communities healthier than others?

The question seems simple. Answering it, however, is a complex task that requires examining the various interrelated factors that determine the health of individuals and communities.

A recent study in Manitoba (see box below) examined this question by using the concept of “social capital.” The research, funded by CPHI, was conducted through a partnership between:

- First Nation communities;
- The Assembly of Manitoba Chiefs; and
- The Centre for Aboriginal Health Research at the University of Manitoba.

The research began with a desire by a committee of the Assembly of Manitoba Chiefs to look at health beyond the individual. The committee wanted research on the complex conditions in First Nations communities that may influence health. The idea of ‘social capital’ was chosen as the concept to examine these conditions.

Social capital is the idea that communities work well or poorly based on the social dimensions of life¹. How life is lived in specific places depends on how people get along, whether they trust and respect each other and the extent to which they share resources. Studying social capital can help identify community strengths and weaknesses. This may help First Nations communities and policymakers direct efforts to improve health.

The aim of this document is to inform others about the results of the research project in Manitoba. The study had two outcomes:

- A framework for thinking about and understanding social capital in First Nations communities; and
- A tool to measure social capital in First Nations communities.

This document explains the concept of social capital; describes the framework developed; introduces the tool to measure social capital; explains how to use it; and discusses what First Nations may gain from research on social capital. It is information that will be of interest to First Nations, Tribal Councils, Aboriginal organizations, researchers and a variety of other stakeholders.

A Study in Manitoba on Social Capital as a Determinant of Health

In 1996, the Royal Commission on Aboriginal People noted that socioeconomic factors, such as income and employment, are important determinants of health for Aboriginal people. However, the Commission criticized the “individual-level” analyses of socioeconomic variables used in most health studies. Similarly, the Health Information and Research Committee (HIRC) of the Assembly of Manitoba Chiefs noted that “analytical frameworks that attempt to associate factors such as poverty with health outcomes are insensitive to the complex ... conditions that exist in First Nations communities” (O’Neil, 1999). Using individual-level data alone, both groups suggested, did not capture the role that community-level factors play in determining health, thereby highlighting the importance of exploring ecological-level data.

¹ This guide presents results from the study in Manitoba as found in Mignone J. (2003). *Social Capital in First Nations Communities: Conceptual Development and Instrument Validation*. Doctoral dissertation. Winnipeg. Department of Community Health Sciences, University of Manitoba. An extensive list and discussion of other studies on social capital can be found in this publication, including major works on social capital by authors such as: Coleman, 1990; Bourdieu, 1983; Putnam, 2000; Woolcock & Narayan, 2000 (full citations provided in the reference list).

After considering several possible options, the HIRC decided that the notion of social capital could help policymakers and First Nations communities understand the community strengths and weaknesses that influence the health of populations. The committee suggested that social capital be explored as a potential determinant of health, and commissioned a proposal for research into the topic.

In response to the HIRC's proposal, the Canadian Population Health Initiative (CPHI) of the Canadian Institute for Health Information (CIHI) funded a study to:

- Develop a conceptual framework of social capital in First Nations communities; and
- Create a culturally appropriate methodological instrument to measure social capital within these communities.

The researchers, working with the HIRC, studied social capital and determined it to be a meaningful characteristic of the social environment in First Nations communities. The study also resulted in the development of a social capital framework that adds to the understanding of the determinants of health in First Nations communities. The framework:

- Presents a dynamic way of characterizing communities, allowing them to be compared according to both internal and external relations;
- Captures social elements important to First Nations communities; and
- Offers a meaningful structure from which to think about and study potential pathways between social-environmental (or, ecological) factors and health.

While this work is one of a number of studies on social capital,¹ it is the first empirical Canadian study of social capital in First Nations communities.

Study design

Between January 2001 and December 2002, three First Nations communities from Manitoba participated in the study. Community members hired as research assistants conducted most of the fieldwork. The study consisted of two phases.

The first phase of the study had two aims:

- To contribute to the development of the conceptual framework; and
- To generate a list of survey questions.

Over a period of approximately three weeks in each community, researchers collected primary data through a combination of in-depth interviews, informal focus groups, participant observation, archival research, and unobtrusive observations. A total of 89 people were interviewed.

Following the interview process researchers identified dimensions of social capital to measure and developed a list of questionnaire items. The questionnaire contained three separate scales, one for each of the three dimensions of social capital, bonding, bridging, and linkage (see "The Framework: What is social capital?" below).

During the second phase of the study, after extensive feedback and seven drafts, a version of a 137-item questionnaire was pilot-tested. Community research assistants administered the survey to a total of 462 randomly selected adults from the three communities. The large size of the sample allowed researchers to conduct a series of analyses to determine the reliability and validity of the questionnaire. The results of these analyses reduced the number of questionnaire items to 99.

The results of the study were shared with representatives of the communities that participated in the study. This research project worked well as a partnership between First Nation communities, a First Nation organization (Assembly of Manitoba Chiefs) and an academic centre (the Centre for Aboriginal Health Research at the University of Manitoba). For more information, see the contact information for the Centre for Aboriginal Health Research.

WHAT DETERMINES HEALTH?

Explaining the concept of social capital first requires a delineation of the distinction between individual and ecological determinants of health. Health—of both individuals and populations—is influenced by many factors, including:

- Biology and genetics;
- Physical environments;
- Education;
- Income;
- Gender; and
- Social environments.

Some determinants of health are individual. For example, a person's income, gender, or education can all make a difference to his or her health. But individual factors alone do not determine the health of individuals, nor can we measure community health by looking only at individual factors.

Other determinants are ecological, that is, the characteristics of the place where people live—for example, levels of pollution or crime or the degree to which neighbours help each other and work together in a community, such as building a playground or looking after each others' children.

Ecological factors in all communities can have favourable or unfavourable effects on health. Further, ecological factors may help differentiate otherwise similar communities. For example, while two communities might have similar levels of poverty, one may have ecological factors that help people stay healthier. In this way, social capital may be an important ecological determinant of health.

THE FRAMEWORK: WHAT IS SOCIAL CAPITAL?

“Social capital” is a concept that tries to capture the essence of community life. The concept is based on the idea that communities work well or poorly based on the ways in which people interact. It emphasizes the social dimension of life and how it is lived in specific places. How well, for example, do neighbours get along? Are people actively involved in making their community a better place? Generally speaking, the more social capital there is in a community, the better that community is for everyone’s health.¹

A community with higher levels of social capital would be expected to have a culture of trust, participation, collective action and norms of reciprocity. Each of these factors can affect health. For example, there is evidence that in communities where people tend to trust each other more, people live under less stressful conditions. Higher levels of trust allow people to learn from each other, share information and enjoy more positive relations.

Decreased social capital, on the other hand, may cause or indicate more unequal patterns of participation and decreased levels of trust, which can also affect health.

In addition to understanding the total amount of social capital in communities, there are different dimensions of social capital that are helpful in pointing to particular strengths and weaknesses in community relationships.

How can we define the dimensions of social capital?

Several researchers have written about social capital.¹ Collectively, they have identified five elements that compose the social capital of a community:

- Social relationships (e.g. how do people get along?);
- Social networks (e.g. do people find it easy to connect with others?);
- Social norms and values (e.g. do people show respect towards others?);
- Trust (e.g. do people in general trust others?);
- Resources (e.g. do people tend to share resources?).

To capture the elements of, and create a framework for, social capital for First Nations communities, researchers for this project divided the concept into three dimensions:

1. **Bonding** refers to the relations within a First Nations community;
2. **Bridging** refers to ties with other First Nations communities or other communities (e.g. nearby cities);
3. **Linkage** refers to the connections between a First Nations community and institutions (e.g. federal/provincial government departments, or public/private corporations such as power utilities or banks).

The importance of distinguishing three dimensions is that it captures the reality that communities do not exist in isolation, but in relationship with other communities, as well as with institutions. It also allows communities to identify whether they are strong or weak in internal relationships (bonding), in relation to other communities (bridging) or in relation to institutions (linkage).

How can we define the components of social capital?

Each of the three dimensions of social capital described above (bonding, bridging, and linkage) can be thought of as having three components (see Diagram 1):

1. **Socially Invested Resources (SIR)** refers to resources used for the benefit of the community as a whole.
2. **Culture** refers to the relations within the community—and between communities and institutions—that are characterized by norms of reciprocity, levels of trust, collective action, and participation.
3. **Networks** refer to the degree to which networks within the community, and between communities and institutions, are inclusive, flexible, and diverse.

Diagram 1: Social Capital Framework

Dimension: Bonding or Bridging or Linkage			
Component	SIR*	Culture	Network
	Physical	Trust	Inclusive
	Symbolic	Norms of Reciprocity	Flexible
	Financial	Collective Action	Diverse
	Natural	Participation	
	Human		

SIR* = Socially Invested Resources

1. Socially Invested Resources (SIR)

The social capital framework includes five descriptors for **SIR**:

1. Physical (e.g. building a recreation centre or paving community roads);
2. Symbolic (e.g. resources that strengthen cultural identity, like cultural camps or Aboriginal language programs);
3. Financial (e.g. access to credit to help people start small businesses);
4. Natural (e.g. land or water that has been protected from pollutants or degradation); and
5. Human (e.g. the skills, talent, experience, education, attitudes, and strengths that people bring to a community).

Resources can be consumed, stored, or invested. Capital is a resource that is invested to create new resources. Socially invested resources are considered aspects of social capital in this framework because they are resources that are invested for the good of the entire community, not only for a few individuals. Thus, SIR should be assessed according to the amount invested and the degree to which they are invested to the benefit of the whole community.

Bonding Example (SIR within a community)

An example of the “bonding” dimension of SIR social capital was provided by a community member in reflecting upon the significance of cultural camps for children and youth:

[T]hey’d show the kids how to snare, trap beaver, skin beaver, rats, muskrats, moose, anything that tracks ... they would always talk Cree. They would make bannock over the fire ... you know, what the people used to do a long time ago, that’s what they did with the kids.

Linking Example (SIR between a community and institutions)

The following observation, made by a First Nations community member on the relationship between the community and institutions, points to difficulties in the “linkage” dimension of social capital as it relates to finances.

With the majority of native people I think it’s either you have poor credit, no credit or [you’re] bankrupt ... and because of that a lot of Band members have limited access or no access to funding to start their own businesses.

2. Culture

The social capital framework includes four descriptors for **culture**:

1. Trust (e.g. of Chief and Council, or generally thinking well of other families);
2. Norms of reciprocity (e.g. when individuals and families tend to return favours);
3. Collective action (i.e. community members are willing to get together to work for common causes); and
4. Participation (i.e. the willingness to volunteer for and participate in community activities).

First Nations with high levels of trust, stronger norms of reciprocity, more potential for collective action, and whose members willingly participate in community activities would be considered to possess high levels of social capital.

Bonding Example (culture within a community)

Returning household favours, an obvious form of reciprocity, is an example of the “bonding” dimension of cultural social capital.

There are norms in our community where people do things for other people. It’s not written down in stone anywhere, it’s just part of the culture. If someone is building a house and says, I need a screw-gun, yeah I have a box, go to my shed and get it. And that person later, the one who loaned the thing, may say, I need to borrow an axe of him, and goes back to the guy that borrowed from him.

Linking Example (culture between a community and institutions)

On the other hand, one study participant spoke about a change in cultural participation between the community and the federal government (the “linkage” dimension):

Yes, I guess part of our practice, part of our culture, is doing a lot of community consultation ... and the federal government slashed that piece of it ... [W]e used to have community co-ordinators who would do the consultation, set up workshops to inform the people about the changes ... [T]he federal government argued that we were doing too much consultation.

3. Networks

Networks can be characterized by how inclusive, diverse, and flexible they are. Higher degrees of these three characteristics would imply higher levels of social capital.

1. Inclusiveness (how welcoming they are of newcomers and the degree of exchange of information with newcomers)
2. Diversity (the co-existence of a number of different networks that are capable of interacting in meaningful ways)
3. Flexibility (the degree to which networks can adapt to new, different, or changing needs)

Inclusiveness, diversity, and flexibility are different aspects of the same phenomenon, a fact that suggests that, in general, communities should have fairly consistent experiences of each.

Bonding Example (networks within a community)

The following comment, made by a study participant, illustrates a lack of flexibility within a community, which is an example of the bonding dimension of social capital:

You hear a lot of animosities that are carried forward from years back ... I've also heard so-and-so and his family did so-and-so to this family and so we are not talking to so-and-so. There is a lot that is carried on for quite a few years.

Bridging Example (networks with other communities)

Another individual expressed concern over the lack of diversity between First Nations networks which is an example of the bridging dimension of social capital:

We have to learn how to network with one another...even network with our First Nations, even the ones that are the most successful, that have all those facilities in their First Nations. How did you do it? Can you lend us a hand over here?

Research shows that the quality of social networks can have an impact on health. For example:

- The feeling of exclusion or social isolation can have an impact on self-esteem.
- A lack of access to information about resources or opportunities may affect health and well being.

Communities with flexible, inclusive and diverse networks tend to develop a social environment that is more conducive to health because more people are likely to have access to opportunities, information, and resources.

A TOOL TO MEASURE SOCIAL CAPITAL

To measure social capital within First Nations communities, researchers created a 99-item questionnaire. A shorter version of the questionnaire, with 55 items, has also been developed and validated. Questions relate to the three dimensions of social capital: bonding, bridging, and linkage. Demographic questions are also included. Information on how to get a copy of the questionnaire is provided at the end of this document

The questionnaire is designed to be administered by members of the community in face-to-face meetings with individual members of their First Nations communities. The individual scores are then averaged for each dimension to reach the social capital score for the community.

The following are some examples of the questionnaire items.

Examples of Bonding Questions (relations within the community)

13) *Thinking of the past five years, do you feel there have been any changes in your community in the following areas?*

Use of traditional healers

	1	2	3	4	5		6	7	9
(+)	Much more	More	No change	Less	Much less	(-)	Don't know	I prefer not to respond	Not applicable

20) *In the past year have you attended any of the following events: Pow Wow, Fundraising event, Competitions, Community festivities other (specify) _____:*

	1	2	3	4	5		6	7	9
(+)	More than 5 times	Between 2 and 5 times	Only one	Thought of going but didn't	Never attended	(-)	Don't know	I prefer not to respond	Not applicable

Examples of Bridging Questions (relations between communities)

22) *Our community works with other First Nations to improve the physical development of our communities (e.g. buildings, roads, and houses)*

	1	2	3	4	5		6	7	9
(+)	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	(-)	Don't know	I prefer not to respond	Not applicable

23) *First Nations organizations like the Assembly of Manitoba Chiefs (AMC), the Assembly of First Nations (AFN), and Tribal Councils help our community to get resources to improve our physical development (e.g. buildings, roads, and houses)*

	1	2	3	4	5		6	7	9
(+)	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	(-)	Don't know	I prefer not to respond	Not applicable

Examples of Linkage Questions (relations between the community and institutions)

63) *There is support from federal or provincial government departments to organize First Nations cultural events*

	1	2	3	4	5		6	7	9
(+)	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	(-)	<i>Don't know</i>	<i>I prefer not to respond</i>	<i>Not applicable</i>

64) *Banks lend money to businesses in our community (e.g. trappers, fisherman, farming, stores, and tourism)*

	1	2	3	4	5		6	7	9
(+)	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	(-)	<i>Don't know</i>	<i>I prefer not to respond</i>	<i>Not applicable</i>

Outcome Example

A community can have higher levels of bonding social capital and at the same time have lower levels of linkage social capital, compared to another community. In fact, the variation in different combinations of bonding, bridging and linkage may explain differences in health status between communities.

MEASURING SOCIAL CAPITAL: BENEFITS, CAUTIONS, AND RECOMMENDATIONS

Benefits

Policy decisions—whether made by different levels of government, corporations, or First Nations leadership—can intentionally or unintentionally strengthen or weaken community levels of social capital. In this way policy decisions can have profound impacts on First Nations communities, and consequently on the health and well being of their populations. The ability to measure social capital has the potential to be very useful for understanding why some First Nation communities are healthier than others. For example, introducing video lottery terminals (VLTs) could be financially beneficial but may decrease norms of reciprocity. Taking into account the potential impact of VLTs on the community’s social capital could influence the decision to bring them into a community.

Cautions

As well as recognizing the potential benefits of research to measure social capital, First Nations and other researchers using this approach should also recognize the following areas of potential caution:

1. Our understanding of social capital and the tools for its measurement need continual improvement, ongoing evaluation, measurement refinement, and validation;
2. To be effective, research using the framework and questionnaire described in this document requires an effective partnership between First Nations communities, First Nations organizations, and academic centres; and
3. The history of relations between First Nations communities and non-Aboriginal people and their institutions highlights the need to acknowledge that concepts like social capital are not value free and are open to different interpretations by different people.

Therefore the results from studies that use this tool to assess social capital should be interpreted with some caution.

Author’s Recommendations

The benefits and cautions outlined above suggest that First Nations and other researchers:

- Make the above cautions explicit in interpreting their findings;
- Ensure that First Nations communities and organizations be involved in defining methods and interpreting findings; and
- Ensure that policy decisions derived from social capital research capture the diverse ways in which the concept of social capital can be interpreted.

HOW CAN USING THIS TOOL HELP IMPROVE HEALTH IN FIRST NATIONS COMMUNITIES?

Among other things, First Nations can use the social capital measurement tool to:

- Identify the relative strengths and weaknesses of communities;
- View the social effects of policies;
- Guide and prioritize action within communities (bonding social capital) and between communities (bridging social capital);
- Clarify decisions in the path towards self-governance;
- Analyze an entire territory using a standardized approach;
- Establish baseline measures for improving social capital as a means to improving health and/or as a way of monitoring the effects of policies on community levels of social capital; and
- Get a better understanding of how to implement policies and programs to improve social capital and health in First Nations communities.

Where is This Tool Being Used?

- The 2002 wave of the Manitoba portion of the second First Nations Regional Health Survey is using the bonding questions in the “Measuring Social Capital” questionnaire.
- The shorter version of the questionnaire, with 55 items, is being used in a research project at York University in Toronto on the strengths of Aboriginal communities.

Where and How Can First Nations Access This Tool?

- A copy of the Social Capital survey is available at the Centre for Aboriginal Health Research (CAHR), University of Manitoba. Javier Mignone, Janet Longclaws, John O’Neil and Cameron Mustard worked on the study of Social Capital as a determinant of health in First Nations Communities. Dr. Javier Mignone is the key contact person. He can be reached at:

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- Before using the instrument, communities should contact the CAHR. The Centre has experience working with research assistants in First Nation communities to conduct survey research. CAHR would like to follow the use of the survey and staff is available to assist in its use.

GLOSSARY

First Nations communities: Refers in this document to First Nations people living primarily on-reserve.

Determinants of health: Factors that affect or influence the health of both populations and individuals.

Individual-level determinants of health: Factors such as age, gender, education level, and personal income that can influence health at the personal level.

Ecological-level determinants of health: Characteristics of the places where people live that can affect residents' health. Ecological level factors could include pollution, urban violence, and the ability of neighbours to get along and work together.

Social capital: Characteristics of the social environment in which people live that can contribute or detract from the health of a community. Generally, the more social capital there is in a community, the better that community is for everyone. Five elements tend to make up the social capital of a community: social relationships, social networks, social norms and values, trust, and resources.

Bonding: A dimension of social capital that describes relations within First Nations communities.

Bridging: A dimension of social capital that describes ties between First Nations communities, and between First Nations communities and other communities, such as nearby cities.

Linkage: A dimension of social capital that describes connections between particular First Nations communities and institutions such as government departments, banks, and corporations.

Socially invested resources (SIR): A component of each dimension of social capital. Socially invested resources are resources used for the benefit of the entire community. They can be physical, symbolic, human, natural, and financial.

Culture: A component of each dimension of social capital that refers to relations within the community, and between communities and institutions. In this instance, cultural social capital refers to norms of reciprocity, levels of trust, collective action, and participation.

Networks: A component of each dimension of social capital that refers to the degree to which relationships within the community, and between communities and institutions, are inclusive, flexible, and diverse.

Norms of reciprocity: Refers to the mutual giving and taking among members of a community. Where strong norms of reciprocity exist, social exchanges are regulated by the custom of returning favours. If someone gives another person a gift, the recipient returns the favour at a later date.

REFERENCES

- Bourdieu P. (1983). *The forms of capital*. In Richardson, J. (Ed.) *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press.
- Coleman JS. (1990). *Foundations of social theory*. Cambridge: The Belknap Press of Harvard University Press.
- O'Neil JD, Kaufert PT, Reading TR, Kaufert J, Young TK, Manitoba First Nations Health Research and Information Committee. (1999). *Why are some First Nations communities healthy and others are not?: Constituting evidence in First Nations health policy*. Research proposal (unpublished). Winnipeg: Northern Health Research Unit, University of Manitoba and Assembly of Manitoba Chiefs.
- Putnam RD. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Touchstone Press.
- Woolcock M, Narayan D. (2000). *Social capital: Implications for development theory, research, and policy*. *The World Bank Research Observer*, 15, 225-249.