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Social Capital as a Health Determinant

How is it Defined?

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Social Capital as a Health Determinant

How is it Defined?

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Résumé

Le présent rapport résume une recherche sur le capital social que nous a confiée la Division de la recherche sur les politiques, Direction des politiques stratégiques, Direction générale de la santé de la population et de la santé publique, Santé Canada.

L'ouvrage essaie d'éclaircir la place du capital social parmi les déterminants sociaux de la santé. Pour ce faire, la première partie analyse la documentation sur les origines du concept ainsi que sur son utilisation dans le domaine de la santé. Dans la deuxième partie, le rapport distingue, dans le domaine des déterminants sociaux de la santé, quatre approches ayant des convergences avec le concept de capital social (la santé des collectivités, le capital social, les inégalités socio-économiques et la cohésion sociale). En ce qui touche le capital social, des recherches sont présentées qui montrent son incidence positive sur la santé (Kawachi et al., 1997 et 1999, Putnam, 2001).

Le rapport passe en revue de manière sommaire, dans sa troisième partie, les diverses méthodes de mesure du capital social ainsi que les indicateurs couramment utilisés dans les recherches sur le sujet. Enfin, la question de l'élaboration des politiques visant à renforcer le capital social est explorée dans la quatrième partie. Une annexe présentant les groupes de recherche et les études liés à la problématique du capital social au Canada complète le document.

Abstract

This report is a summary of social capital research commissioned by the Policy Research Division, Strategic Policy Directorate, Population and Public Health Branch, Health Canada.

The work attempts to clarify the place of social capital among the social determinants of health. The first part analyzes the documentation on the origins of this concept and its use in the health field. The second part of the report sets out four approaches in the area of social determinants of health. These approaches, which all centre on the social capital concept, are community health, social capital, socio-economic inequality and social cohesion. Research demonstrating the positive effects of social capital on health is presented in studies such as those conducted by Kawachi et al. (1997 and 1999), and Putnam (2001).

The third part of the report briefly reviews the various methods used to measure social capital, as well as the indicators commonly used in research on the subject. Finally, the development of policies aimed at strengthening social capital is explored in the fourth part. Research groups and studies linked to social capital issues in Canada are included in an appendix.

The Author

Solange van Kemenade holds a doctorate in sociology and is currently a research analyst with the Policy Research Division of the Strategic Policy Directorate, Population and Public Health Branch at Health Canada. She is interested in the socio-economic determinants of health and how these are taken into account in policy development. She is also a researcher for the Canada Research Chair in Community Development and a lecturer at the Université du Québec en Outaouais. Her doctoral and post-doctoral research has focussed on social economy, local development, North-South cooperation and new social practices in the area of international cooperation.

Contents

Tables

Introduction

Objectives of Social Capital Research

The research commissioned by the Policy Research Division (formerly the Quantitative Analysis and Research Division) of the Strategic Policy Directorate had two objectives. The first consisted of identifying and indexing reference works on social capital issues, as well as the work of Canadian researchers in the field of social determinants of health. This report summarizes the work carried out during this first stage.

The second objective was to design a module of survey questions that Statistics Canada could use to develop health surveys or other initiatives aimed at a thorough examination of these issues. A proposal for social capital measurement indicators and certain methodological considerations are the subjects of a second report.[1]

The Strategic Policy Directorate has been interested in this topic since 1999 when it organized a meeting of Canadian community health experts. The primary goal of this meeting was to explore the possibility of including questions relating to social capital in the Canadian Community Health Survey (CCHS). Subsequently, researchers at the University of British Columbia carried out a reference analysis and produced a document that included a list of potential questions. However, because of the tight schedule and the fact that the questions required pre-testing, they were not included in the proposed survey. Neither the theme nor the questions have been revised or validated since 1999.

Since that time, other initiatives have been undertaken to evaluate socio-economic determinants of health that have recently attracted the interest of researchers. These studies are based on different conceptual frameworks and use equally diverse approaches. Among other things, there is an interest in socio-economic inequality and its effect on health,[2] in the widening gap of this inequality between or within neighbourhoods in the same city, and in strengthening the capacity of communities to improve their well-being.

The analysis of socio-economic determinants at the community level has been the subject of extensive research in the past two years. For example, a second Statistics Canada initiative will use CCHS data to examine the effects of community factors on the health of Canadians. This type of approach is also frequently used in research on the health of Aboriginal peoples and rural communities.

These initiatives are emerging in a highly favourable environment. At the national level, there is a desire to have a better understanding of the effects of social factors on Canadian society in order to develop policies that are better adapted to the new realities. This interest is reflected in the interdepartmental research initiative on social cohesion in Canada and the formation of the Social Cohesion Network.

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[1] van Kemenade, Solange. *Social Capital as a Health Determinant: How Is It Measured?* Report prepared for the Policy Research Division, Strategic Policy Directorate, Population and Public Health Branch, Health Canada, 2003. (Report for publication submitted to the Applied Research and Analysis Directorate, Information, Analysis and Connectivity Branch, Health Canada.)

[2] Health Analysis and Modeling Group (Statistics Canada) developed the project entitled *Metropolitan Socio-economic Inequality and Population Health*, presented at the Canadian Population Health Initiative by the Centre for Health Services and Policy Research of the University of British Columbia in September 2000.

Finally, it should be noted that this research has led to the discovery of convergent initiatives in the academic world such as the social capital survey conducted by a group of researchers at the University of British Columbia.

This report begins with a presentation of the social determinants of health, which include social capital.

Social Determinants of Health: Emergence of a New Paradigm?

For many years, population health studies have concentrated on analyzing determinants from the medical and genetic fields. But as Wilkinson points out on page 2 of his work published in 1996, "neither medical nor genetic science can provide answers as to why one country is healthier than another, or why most countries gain two or three years of life expectancy with each passing decade."

It was only during the past two decades that medical science began to question the effect of factors such as income, unemployment, poverty or social networks on the health status of individuals. Researchers and health practitioners, who had been trained and made aware of the need to determine the adverse effects of chemicals or germs, realized that the social and economic structure of a society also had consequences for health. This discovery gave rise to a new approach that takes into account the interface between health and society (Wilkinson, 1996). Since this way of addressing the issue deviates from the classical approach, it may be appropriate to define it as an emerging new paradigm.

In this context, morbidity, mortality and physical disabilities, to name but a few, constituted the first generation of health indicators. For the most part, they referred to general environmental health conditions and pathogenic factors harmful to health.

Population health studies continued to evolve and subsequently incorporated non-medical indicators, more specifically, those related to the social field. These indicators refer to social and mental well-being, quality of life, life satisfaction, income level, employment and working conditions, education and other factors that had recently been found to have an effect on health (Health Canada, 1999).

Since the 1990s, there has been an emphasis on determinants and on developing indicators related to aspects of life that had not been measured to any extent until that time, and whose link with health had not been clearly specified. These are the effects that the immediate social environment (family and friends), social networks, mutual trust, civic participation, community engagement and other factors can have on the health of individuals. The majority of these indicators are associated with a microsocial scale (the community) and constitute an effort to link the individual to the social.

The growing interest in indicators in the population health field is emerging at the same time as an increasing worldwide interest in the use and viability of social indicators (Health Canada, 1999). Similarly, in industrialized countries, improved health and prolonged life expectancy of the population in general have resulted in a search for indicators that reveal more about the new living conditions.[3] Efforts have focussed on neglected factors such as personal health habits, community factors (environment, economy, society) that are likely to affect health, and factors relating to "social support," to name but a few. The rapprochement between

[3] The "healthy-life expectancy" indicator reflects this search for more adapted indicators.

sociologists and epidemiologists also explains this growing openness and interest in new health determinants on the part of the health sciences (Wilkinson, 1996).

A second tendency has been noted, one that reflects the need to link social indicators to economic, health and even environmental indicators. The aggregation of these indicators in composite indexes is an obvious indication of progress in analyzing the quality of life of a population. Examples are the GPI (Genuine Progress Indicators), developed to measure socio-economic changes in Alberta, or the Index of Social Health developed by Miringoff in the United States and adapted for Canada by Brink and Zeesman (1997). These indexes go beyond traditional economic indicators such as gross domestic product, which do not necessarily translate real needs in terms of quality of life. Other attempts of this kind will be mentioned in the section on approaches.

This report focusses on these new health determinants and indicators. Despite their differences, the concepts studied stem from a similar underlying idea. In fact, whether it is a question of social capital, community capacity or social cohesion, among others, there is a basic certainty that intangible elements affect individuals and communities, either by strengthening them or rendering them more vulnerable in the face of adversity.

With regard to social capital, the studies increasingly show that communities supported by a substantial stock of social capital have better economic and social performance (Putnam, 2000). These communities have lower crime rates, tax evasion is less common, individuals are more tolerant and good-humoured, children have a higher level of well-being and are more successful in school. The beneficial effects of social capital on health have also been highlighted in the research. It is for this reason that Health Canada is interested in new determinants that influence population health.

The first part of this report briefly reviews the approaches and definitions relating to social capital, and provides a concise description of the origins of the concept as well as pioneering studies in the field, including the criticism levelled against them. The second part focusses on other approaches that underline the importance of social factors in the health status of populations. In this context, four approaches are briefly presented: the approach centred on community health, the approach centred on social capital, the approach centred on social and economic inequality (e.g. income distribution) and, finally, the approach centred on social cohesion. Although these approaches share concepts and methods, there are certain differences among them. The third part briefly addresses the question of measuring social capital, which is the subject of a second report. Finally, the issue of developing policies aimed at strengthening or developing social capital is briefly discussed in the fourth and final part. Appendix A provides a short summary of research groups and studies linked to the field of social capital in Canada.

Social Capital Studies

Approaches and Definitions

Pioneers in the Conceptualization of Social Capital

The origins of the social capital concept date back to the 1970s and are often associated with studies conducted by Coleman (1990) and Putnam (1993). In attempting to find non-economic factors to explain the success of certain economic processes, these authors draw on concepts such as trust, participation in civil society and social networks, all of which form the "social capital" of a given community.

Putman's study, initiated in the 1970s but published in 1993, focussed on explaining the institutional performance and socio-economic development of certain regions of Italy, including their industrial productivity, while relating traditions in matters of civic engagement to relationships of power. The findings led to a classification of the regions according to their level of civic vitality and, subsequently, to the establishment of a link with their socio-economic development.

In a community, the presence of citizens' networks, such as neighbourhood associations, choirs, cooperatives, sports clubs and political parties, reflects an intense horizontal interaction. Members of these networks have a similar status in terms of power. The more prevalent these networks are in a given community, the more citizens are able to work together for the good of the community. Why do these networks of civic engagement have such a beneficial effect? Putnam evokes four main reasons (Putnam, 1993: 173–74).

- The networks constitute an obstacle for opportunists in interindividual transactions (game theory).
- The networks foster robust norms of reciprocity.
- The networks facilitate communication and thus contribute to the growth of trust.
- The networks promote the survival of the historical heritage.

Putnam defines social capital as follows:

> The characteristics of the social organization such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit. (Putnam, 1995: 67)

In *Bowling Alone: The Collapse and Revival of American Community*, published in 2000, Putnam claims that there is a decline in civic engagement in American society. Americans are increasingly unlikely to belong to civil society groups such as organized bowling leagues. The result is an erosion of social capital — that is, intangible levels of trust that maintain the cohesion of societies and keep them healthy, livable and crime-free.

Putnam's study also shows the existence of higher levels of social capital in some places (the Minneapolis–Saint Paul area in Minnesota) and lower levels in others (Baton Rouge in Louisiana). This phenomenon is linked, among other things, to the historical relationship with slavery in each of these regions (Putnam, 2000), as well as the origin of their immigrant populations.

James Coleman is also recognized as a pioneer in social capital studies.[4] In his book on the foundations of social theory (1990), he associates social capital with the social relationships that are formed between individuals:

> Social capital would therefore be constituted by relationships of authority, relationships of trust and norms. […] Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would not be possible in its absence. […] Contrary to other forms of capital, social capital inheres the structure of relationships between persons and among persons. It is lodged neither in individuals nor in physical implements of production.

Social capital theorists take the opposite position to classical and neoclassical economic theory, which assumes that society is made up of the sum of persons acting individually to achieve non-collective goals. The followers of social capital theory, on the other hand, consider that this vision is only imaginary, for people do not necessarily pursue individualist interests and neither do they act independently of each other.

In a perspective that converges with that of Putnam, Fukuyama (1997) emphasizes the cultural dimension of economic life. Specifically, culture is the source of the differences in economic performance among countries. Comparing Western countries with those of Southeast Asia, Fukuyama distinguishes two types of societies, those centred on the family and those centred on trust. In the former (China, France, Italy and South Korea), the family is the basic unit of economic organization. To some extent, it is difficult to establish firms that go beyond the strict family framework, and the state must intervene to encourage the creation of companies. Societies centred on trust (Japan and Germany) have large companies that are not family-based. Work relations in these companies are more efficient and satisfying and the work can be organized along more innovative lines.

Furthermore, social trust is the principal component of social capital. According to Fukuyama, "social capital is a capability that arises from the prevalence of trust in a society or in certain parts of it. It can be embodied in the smallest and most basic social group, the family, as well as the largest of all groups, the nation, and in all other groups in between." (Fukuyama, 1995: 26)

Recent Studies

In the past three years, the World Bank has taken an interest in social capital, chiefly because of the relationships between social capital, poverty and development. Hence, this international organization's PovertyNet site includes a section devoted to social capital.[5]

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[4] Coleman notes that Loury (1977, 1987) first introduced the concept of social capital in the economy to determine the social resources that are useful in the development of human capital. The same author cites the works of Ben-Porath (1980), who originated the "F-connection" concept (i.e. networks made up of families, friends and firms). Most of the subsequent research uses research by Putnam and Coleman as a main reference.

[5] The World Bank's PovertyNet site is located at worldbank.org/poverty/index.htm

> According to the World Bank, social capital refers to the institutions, relationships and norms that shape the quality and quantity of a society's social interactions. There is increasing proof that social cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of institutions which underpin a society, but the glue that holds them together.

Social capital would therefore be associated, on the one hand, with social networks and the norms they promote (horizontal associations) and, on the other, with values and links, such as religion, ethnicity or socio-economic status (vertical associations), that transcend a community's social divisions. A broader vision of social capital takes into account the two types of associations mentioned, as well as the social and political environment that shapes social structure and helps in the development of norms.

Social capital has positive effects on production, by reducing the cost of commercial transactions, and on a population's general well-being. It facilitates coordination and cooperation. Studies have nonetheless called attention to the negative effects that certain associations based on forms of social capital may have on collective interests (World Bank, 2001; Lancy, 1997). Examples of these groups are drug dealers and the Mafia.

In the editorial of the feature issue of *Isuma* (the *Canadian Journal of Policy Research*) on social capital published in the spring of 2001, social capital is defined as the series of relationships, networks and norms that facilitate collective action. However, the editorial notes that while certain authors integrate trust into this definition, others maintain that it is important to distinguish between the nature of social capital and its effects. A second fundamental distinction noted is the one that is often made between affective social capital (bonding) and indirect social capital (bridging). The former concerns the relationships and norms that strengthen links between groups, whereas the latter establishes bridges between them.

Furthermore, the notion of social capital is closely related to the notions of social cohesion and human capital, two essential concepts in policy and policy research. It is generally agreed that social capital is both a consequence and a factor of social cohesion (Schuller, 2001).

Synthesis Table 1. Social Capital Definitions

Authors	Definition
World Bank (2001)	Social capital refers to the institutions, relationships and norms that shape the quality and quantity of a society's social interactions.
***Isuma* (2001)**	Social capital is generally defined as the series of relationships, networks and norms that facilitate collective action. The approach is heuristic rather than definitive. In other words, it encourages questions and reflection rather than providing answers. It is this heuristic quality that is the primary, very powerful advantage of the concept of social capital.
Coleman (1990)	Social capital is therefore made up of relationships of authority, relationships of trust and norms. […] Like other forms of capital, social capital is productive, making possible the achievement of certain ends that would be unattainable in its absence. […] Unlike other forms of capital, social capital inheres in relationships among persons. It is lodged neither in individuals nor in physical instruments of production.
Putnam (1995)	The features of social organization such as social networks, norms and social trust that facilitate coordination and cooperation for mutual benefit.
Fukuyama (1997)	Social capital is a capability that arises from the prevalence of trust in a society or in certain parts of it. It can be embodied in the smallest and most basic social group, the family, as well as the largest of all groups, the nation, and in all other groups in between.
Landry, Amara and Lamari (2001)	Social capital refers to the resources gained from participating in relationship networks that are relatively institutionalized.

Criticism

The work on social capital has elicited a certain amount of criticism, directed mainly at Putman and the research he inspired. The definition of the associationist dimension it has established is viewed as extremely limited. This dimension forms the basis for what Putnam defines as civic engagement — that is, people's participation, on a broader scale than that of politics, in the life of their communities.[6] In empirical research, the indicators of civic engagement do not take account of alternative associations or new social movements. In his thesis on the decline of social capital in the United States, for example, Putnam uses the example of declining participation over the years in traditional parent-teacher associations, without taking account of alternative parent-teacher organizations that could represent bridging social capital (Van Rooy, 2001).

Social capital research also focusses on classic forms of associationism and neglects the role of social movements. It ignores the older forms (e.g. ecological, feminist, youth and human rights movements) as well as those that emerged during the 1990s. The latter includes networks and local, regional and global social movements that have expanded as a result of new information and communications technologies. There is also a diversity of movements founded on a proactive renewal of the concept of citizenship. Examples include movements that advocate socio-economic models as replacements for the prevailing models. Among other things, these movements oppose globalization and free trade and advocate equitable commerce and the imposition of a tax on financial transactions.

[6] Putnam writes, "I use the term "civic engagement" to refer to people's connections with the life of their communities, not only with politics." (Putnam, 1996)

Finally, and again in relation to associationism, the research also ignores self-help groups such as Alcoholics Anonymous, Émotifs Anonymes and single-parent family groups. These groups provide important support for their members, are self-organizing and are completely independent of the public sector.

Other observations note the contrast in the conclusions that Putnam draws from his research in Italy and the United States. He emphasizes the secular sustainability in Italy of practices linked to social capital, whereas in the United States, he observes a decline in these practices that leads him to his somewhat pessimistic vision of their future.

Finally, authors such as Lenci (1997) suggest a critical reading of the use of the concept by explaining that, as it is defined, social capital could also be applied to a criminal-type organization such as the Italian Mafia.

With regard to the link between social capital and health, Pope (2000) criticizes the superficiality of the measurement of social capital in health surveys. The author emphasizes that research on social capital requires a measurement of the strength of the social links that would subsequently help determine the resources or the advantages they are likely to generate. In the current context, surveys can measure only the first aspect, thereby neglecting the second.

Approaches Used in Studies on Social Health Determinants

During the 1990s, a new wave of research was conducted in the wake of renewed interest in social determinants of health related to the interface of the individual and society. The aspects studied included the impact on health of economic inequality and of the immediate social environment (friends, family, neighbours), the effects of greater participation in community activities, and, in the case of Aboriginal communities, the threat represented by the loss of ancestral cultural values.

Four distinct approaches can be identified in this research:

- the approach centred on community health;
- the approach centred on social capital;
- the approach centred on socio-economic inequality; and
- the approach centred on social cohesion.

The Community as a Social Determinant of Health

This approach emphasizes the role of the community in improving and preserving the health status of its population. It examines the level of health in communities across Canada, and the elements they require to improve or maintain their health status. The indicators used in this approach are related to mental health, the environment, the economy and the social environment. The following are some examples: rates of alcoholism, suicide and domestic violence, as well as the loss of traditional values and customs (primarily in the case of Aboriginal communities). Concepts such as community capacity, resilience and efficacy are associated with this approach based on the broad lines of health promotion. A number of initiatives undertaken since the 1980s are consistent with this direction. Examples include Healthy Communities, Healthy Schools and Healthy Hospitals.

This approach advocates participation by stakeholders and members of the community. The latter must be empowered or participate actively. The intervention can take place within the framework of action research.

Synthesis Table 2. Approach Centred on Community Health

Authors	Frankish et al. (British Columbia group), Kulig et al. (Alberta group), researchers at the Atlantic Health Promotion Research Centre, Hancock, Labonté, Edwards
Conceptual Framework	Analyzing social determinants of health at the community level
Examples of Studies Conducted	• Studies by Kulig et al. on Alberta and Kentucky mining communities • Studies by the Atlantic Health Promotion Research Centre on rural communities • EAGLE project on four Aboriginal communities (funded by Health Canada)
Methodology	• Qualitative studies and intervention • Case studies
Indicators	Relate to mental health, the environment and the social environment of community members. Examples: • alcoholism rate; • suicide rate; and • rate of domestic violence.
Type of Intervention	Teams made up of various stakeholders and community members. Need for community empowerment. Opportunity to intervene within the framework of action research.

Social Capital as a Social Determinant of Health

Studies Linking Health to Social Capital

The use of social factors to explain community health problems is not a recent phenomenon. In his study on suicide, Durkheim had already demonstrated the importance of social integration for population well-being (Kawachi et al., 1999: 1187). In the late 1970s, longitudinal research conducted over nine years among the residents of Alameda County in the United States raised the importance of social links for the health of the population studied (Berkman and Syme, 1979; Berkman and Breslow, 1984). This research proved that persons with weak or nonexistent social links had a greater probability of dying than those with strong links.

This research, as well as subsequent studies (House, Robbins and Metzner, 1982), highlighted the close relationship between social networks and mortality rates. More specifically, these studies concluded that the risk of death was two to three times higher for persons lacking social support than for those who were well integrated into social networks.

In one of his more recent works, published in 2000, Putnam devotes a chapter to presenting proof of the positive relationship between health and social capital. According to his research, there is a strong positive relationship between the public health index and the social capital index, as well as a negative relationship between the social capital index and the global index of the causes of mortality. In addition, the author emphasizes that the positive effects of integration and social support vie with the effects of known health risks such as smoking, obesity, hypertension and physical inactivity. In short, statistically speaking, the proof of the effects of social integration on health is very strong (House et al., cited in Putnam, 2000).

On the strength of these studies, Kawachi (1997, 1999) established a positive correlation between social capital and health status, using indicators such as the mortality rate and self-rated health status. Hyyppä and Mäki (2001) concluded that the higher life expectancy of Swedish-speaking Finns seems to be associated with the social networks they establish.

Since the late 1990s, social capital has been considered as a determinant of certain diseases. Although very recent, this type of research is becoming more and more frequent. It includes studies on the link between the participation of members of a community in volunteer organizations and the prevalence of AIDS (Campbell, Williams and Gilgen, 2002), as well as the influence of social capital on hypertension (Worsley, 2001).

The analysis of the influence of classic risk factors in the study of disease is thus enriched by taking into account the influence exerted by the community on the individual, especially through the way the individual interacts with other community members.

How is Social Capital Defined in Studies Linking it with Health?

Social capital is as important an indicator of a country's health as the unemployment rate, the gross domestic product or environmental conditions (Putnam, 2000).

To analyze this social determinant of health, researchers essentially drew on the basic indicators of social capital, as originally defined by Coleman (1990) and Putnam (1995). Although neither the concept nor the indicators are novelties in the health field, studies by social capital theorists have nevertheless renewed the approach and prompted other, more recent studies in the field, especially those of Kawachi and his colleagues (1997, 1999). This author uses the concept of social capital as a combination of indicators grouping social trust, civic participation and networks (see Synthesis Table 6).

While the studies succeeded in showing, through statistical analyses, that there are direct relationships between the variables mentioned, the mechanisms underlying these links are still misunderstood. An example is the association between inequality in income distribution and mortality rates (Kawachi et al., 1997). Some authors hypothesize that the intensification of inequality in the distribution of wealth breeds increased frustration, which, in turn, could have negative effects on the physical and psychological health of individuals (Wilkinson, 1996; Health Canada, 1999).

The findings emerging from these analyses have prompted additional research on the social and community dimensions of health. Academic researchers, the public sector (health departments and agencies) and even international agencies are turning their attention to the issue.

Synthesis Table 3. Approach Centred on Social Capital

Authors	R. Putnam (1993, 1995, 2000), J. Coleman (1988, 1990), P. Bourdieu (1986), F. Fukuyama (1997), World Bank (2000)
Conceptual Framework	Linking social capital to institutional and economic performance (Putnam's study on Italy), or social capital to children's well-being, the crime rate, people's mood, health, tax evasion, tolerance, economic equality, civic equality and educational performance (Putnam's study on the United States)
Examples of Studies Conducted	Putnam's studies on Italy (1970s) and the United States (1990s)
Methodology	Qualitative, but particularly quantitative and comparative studies
Indicators	Relate to the social field: trust, civic-mindedness, participation, networks, etc. Constructing indexes
Type of Intervention	Large-scale studies on social capital are not aimed at intervention. However, they can be used to develop policy.

The World Bank lists seven key sources of social capital:

- families, because they are the main sources of economic and social welfare for their members; the family is the first building block in the generation of social capital for the larger society;
- communities, by means of social interactions among neighbours, friends and groups;
- firms, because building and sustaining efficient organizations demands trust and a common sense of purpose;
- civil society, because it provides opportunities for participation through its organizations;
- the public sector, because it plays an essential role in the functioning of any society;
- ethnicity, through ethnic groups or associations that have a strong presence, especially in the areas of immigration and microenterprise development; and
- gender, by means of social networks that help improve the quality of life for women.

Socio-economic Inequality as a Health Determinant

Studies conducted as part of this approach are aimed at linking health to socio-economic inequality, especially with regard to income distribution, the concentration of poverty and ghettoization. The basic notion is that it is less the overall wealth of a society and more how it is distributed that determines the health status of its citizens. Inequality is linked to mortality both indirectly (e.g. weak public investment and weak stock of social capital) and directly (e.g. frustrations and irritants stemming from the perception of the inferiority of one's own social situation) (Wilkinson, 1996; Ross, 2000; Health Canada, 1999).

Health Canada (1999) adheres to this hypothesis. In its report on health determinants, the department notes that "health status improves at each step up the income and social hierarchy" and that "the healthiest populations are those in societies which are prosperous and have an equitable distribution of wealth."

Why are higher incomes and social status associated with better health? In general, poverty is associated with unfavourable living conditions (e.g. bad housing and inadequate diet), but it is only recently that "the biological pathways for how this could happen are becoming better understood. A number of recent studies show that limited options and poor coping skills for dealing with stress increase vulnerability to a range of diseases through pathways that involve the immune and hormonal systems." (Health Canada, 1999)

Health Canada also notes that there is increasing proof that a better social and economic situation goes hand in hand with better health. Finally, Health Canada observes that income level and social situation appear to be the most important health determinants.[7]

This approach is supported by statistical analyses of relationships such as those between income distribution and a population's mortality rate. Research conducted by Ross (Health Analysis and Modeling Group, Statistics Canada, 2001), which draws on international comparisons, is consistent with this perspective. This project first explores the dynamics of income inequality and the links with health in Canadian society. The second purpose of the research is to develop a series of socio-economic indicators to identify the factors that provide the strongest links between inequality and mortality. It will also compare the situation in large American and Canadian cities. (Dunn and Ross, 2000). It should be noted that unlike the conclusions of the research conducted in the United States, the initial results of the Canadian research do not show a relationship between income inequality and mortality, either provincially or in metropolitan regions. Nevertheless, the relationship between socio-economic status and health exists among individuals. Researchers suggest three hypotheses to explain the absence of relationships between health and income inequality: the universality of Canada's healthcare system, Canada's narrower income gap and the difference between the urban areas of Canada and U.S. (Ross, 2001).

Synthesis Table 4. Approach Centred on Socio-economic Inequality

Authors	Wilkinson (1996), Health Analysis and Modeling Group, Statistics Canada (N. Ross and J. Dunn, etc.), Health Canada (1999)
Conceptual Framework	Linking socio-economic inequality (income distribution, poverty, ghettoization in large cities, etc.) and health (traditional indicators, e.g., mortality rate)
Examples of Studies Conducted	Statistical analyses of the relationship between income distribution and a population's health status
Methodology	Quantitative studies (multifactorial analyses, etc.)
Indicators	Economic (poverty rate, income distribution, residential segregation, etc.) and health status
Type of Intervention	Policy development

Social Cohesion and Health

Social cohesion involves building shared values and communities of interpretation, reducing disparities in wealth and income and generally enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges, and that they are members of the same community (Maxwell, 1996, quoted in Jenson, 1998).

[7] The report on health determinants is available on the Health Canada Web site at www.hc-sc.gc.ca/hppb/ddsp/determinants/index.html#evidence.

The Social Cohesion Network, made up of 23 federal departments and agencies, has developed the following definition: "Social cohesion is the ongoing process of developing a community of shared values, shared challenges and equal opportunity within Canada, based on a sense of trust, hope and reciprocity among all Canadians."

Research conducted in Canada within the framework of the Social Cohesion Network is aimed at exploring the dimensions of the social cohesion of Canadian society and identifying the fault lines, the axes of identification with the community and repercussions on social cohesion. The links between health and social cohesion are one of the concerns in this field, which is channelled by Health Canada's participation in the Network. According to this approach, social capital is an asset of civil society that strengthens social cohesion.

From a methodological perspective, the studies based on this approach are quantitative and qualitative.

Synthesis Table 5. Approach Centred on Social Cohesion

Authors	Policy Research Subcommittee on Social Cohesion of the Policy Research Initiative and Social Cohesion Network
Conceptual Framework	Exploring the dimensions of the social cohesion of Canadian society and identifying the fault lines, axes of identification with the community and repercussions on social cohesion. Links with health status is one of the dimensions. According to this approach, social capital is an asset of civil society that strengthens social cohesion.
Examples of Studies Conducted	Research on the social indicators of social cohesion Other academic research
Methodology	Quantitative and qualitative studies
Indicators	Social and economic indicators, indicators centred on social capital and health status
Type of Intervention	Policy development

In conclusion, these four approaches do not function in isolation. The bridges between them are more and more frequent and the degree of complexity varies. The research includes studies:

- focussing on the relationship between social capital and the status and level of health of a population (Kawachi et al., 1996, 1997; Wilkinson, 1999);
- focussing on the links between socio-economic inequality, social capital and health (Kawachi et al., 1997);
- in line with a perspective centred on community health, but incorporating indicators relating to social capital (Frankish et al., 1999; Kreuter, Young and Lezin, 1998); and
- starting from an approach centred on social cohesion and incorporating indicators relating to social capital (Social Cohesion Network, 2001).

Indexes of Well-being

This section focusses on the contribution made by creating indexes grouping economic and social indicators in expressing community well-being more effectively. In an attempt to classify indicators of well-being in Canada, Sharpe (2000) divides them into four categories:

- time series indexes of well-being (e.g. the Measure of Economic Welfare);
- cross-national indexes of well-being (e.g. the Index of Social Progress);
- provincial and community indexes of well-being (e.g. the Ottawa-Carleton Quality of Life Index); and
- sets of social indicators (e.g. the Federation of Canadian Municipalities Quality of Life Reporting System).

Among other things, these indexes allow an assessment of the evolution of social, economic, health and environmental conditions over many years (in certain cases) and account for their improvement or decline. Hence, the study on Alberta revealed that although the province has enjoyed economic growth, the indicators show that progress has not been as great in terms of social welfare, and that it has even declined in certain cases (notably with regard to poverty and unemployment rates). Furthermore, little progress has been made in the area of income distribution, and economic prosperity has resulted in significant ecological costs for the environment. These indexes are constructed from existing data sources, primarily those of Statistics Canada and provincial agencies. This necessarily means that the indicator is in line with the concept (which defines what is to be measured), not the reverse.

Synthesis Table 6. Social Capital and Health Studies

Author and Year of Study	Objectives	Sources	Indicators Used	Results
Berkman and Syme (1979)	To identify and analyze the relationships between social and community links and mortality in Alameda County	Human Population Laboratory Survey (California Department of Health Services)	1. Marriage 2. Contacts with family and friends 3. Participation in religious life 4. Participation in formal and informal group activities	Persons with weak or nonexistent social links had a greater probability of dying during the period following the study than those who had strong links.
Kawachi, Kennedy, Lochner and Prothrow-Stith (1997)	To determine the relationships between income distribution, mortality and social capital	1. General Social Surveys (National Opinion Research Center) 2. United States census	1. Civic engagement (participation in associative and community life) 2. Social trust (three questions)	1. Negative relationship between the degree of inequality of income distribution and participation in community activities 2. Positive relationship between civic participation and the mortality rate 3. Positive relationship between the level of inequality of income distribution and lack of trust 4. States with the highest rate of civic participation had the lowest rate of mortality from heart disease and malignant tumours.
Kreuter, Young and Lezin (1998)	1. To measure the stock of social capital of two rural communities in the United States 2. To determine the possibility of an association between social capital and the efficacy of health program promotion.	1. Telephone survey 2. Interviews with community leaders 3. Content analysis (local newspapers)	Civic participation, trust, social engagement and reciprocity	Positive association between social capital and the efficacy of interventions
Putnam (1995)		1. Organization data banks 2. Roper Survey 3. DDB Survey	1. Membership in volunteer associations (30 of the most important, such as the Knights of Columbus) 2. Membership in professional organizations (e.g. the American Medical Association) 3. Questions from Roper Survey on civic participation (e.g. signing a petition, participating in a community meeting) 4. Questions from DDB Survey (frequency of certain behaviours, e.g., attending church, volunteering)	Decline in social capital in the United States, according to long-term trends observed during the 20th century

How Is Social Capital Measured?

The level used to analyze social capital differs widely in the studies selected. Some studies focus on the social capital of a small community (Kreuter et al., 1998), others compare a country's provinces or regions (Putnam, 2000), while others use countries as a unit of comparative analysis (Knack and Keefer, 1997). Furthermore, social capital research places a great deal of emphasis on comparisons, even those carried out at the community level.

The World Bank distinguishes three types of methodological approaches to measuring social capital (World Bank, 2001), namely:

- quantitative studies;
- comparative studies; and
- qualitative studies.

Quantitative Studies

Quantitative studies use large-scale databases for their analyses. For example, Knack and Keefer (1997) drew on the World Values Survey for the indicators of trust and the civic norms they used to analyze 29 market economies.

Most of the studies funded by the World Bank in African countries are also quantitative studies. An example is the study conducted by Narayan and Pritchett (1998) aimed at measuring social capital in Tanzania. The researchers designed a survey especially for this purpose and used a poverty survey (the Tanzania Social Capital and Poverty Survey) for the variables such as income distribution that are linked to social capital.

Kawachi and his colleagues (1997) used data from the General Social Survey[8] and the national census for their analyses on social capital and health in the United States. This research follows a distinctly quantitative approach.

Comparative Studies

This type of study compares, among other things, communities, countries, regions and groups of countries. An example is Putnam's study on Italy (1993), which represents the origin of the conceptualization of social capital. In this research, Putnam inquires into the reasons for the wide economic, social and institutional differences between Italian provinces. In his study on the United States (2000), Putnam compares the behaviour of American states in matters of criminality, health, education and other realties, based on their stock of social capital.

Kreuter, Young and Lezin (1998) compared two rural communities in the United States to determine whether there was an association between social capital and the effective promotion of health programs.

Some researchers have explored the differences in the level of social capital among American immigrant communities. Portes (1995) and Light and Karageorgis (1994)[9] showed that certain groups such as the Koreans in Los Angeles or the Chinese in San Francisco integrated

[8] This survey was conducted by the National Opinion Research Center.
[9] This research is listed on the World Bank site.

more effectively into the host society than did other groups because of their support networks for new arrivals.

In Canada, Buckland and Rahman (1999) compared the reaction of three communities that experienced the Red River flooding in Manitoba in 1997. The research revealed that the two communities with a higher stock of social capital succeeded in organizing themselves more rapidly and efficiently than the third, which had a lower stock of social capital.

Qualitative Studies

Qualitative studies are in the minority in the social capital research inventory. The above-mentioned Canadian study on three rural Manitoba communities is an example of this type of study. The information-gathering techniques were essentially qualitative. For example, the researchers used interviews with community leaders and participant observation.

Research by Kreuter, Young and Lezin (1998) is another example of a qualitative study. The researchers used information-gathering techniques such as interviews with community leaders and content analyses of local newspapers.[10] They also used quantitative collection techniques such as telephone surveys.

Indicators

Despite the presence of debate, there is some consensus on the indicators that are used most frequently to measure social capital. Most of the studies consistently use the definitions and indicators established by social capital theorists. Accordingly, **trust** appears to be one of the most important. The two elements of this indicator are trust in others and trust in institutions (government, police, politicians, journalists, etc.).

The second key indicator is **civic engagement**, which is measured by membership or participation in organizations, groups or networks offering social or political activities.[11] The research distinguishes two elements within this indicator. One relates to participation in community activities, especially through neighbourhood or parent associations, volunteerism, sports leagues, advocacy groups or other forms of activism. The other involves participation in political life, including participating in elections and signing petitions.

Social networks are the third indicator that is frequently found in the research. They are formed by the person's immediate environment and by secondary networks. Networks centred on the individual include immediate networks (i.e. the close family, friends and neighbours with whom the person has frequent contact and who provide support). Moreover, this type of support, known as "social support" was the first to be associated with health in the research on social determinants. The secondary networks include those formed through relationships that individuals establish, especially in the workplace and recreational environments, during community or church activities. This indicator is used to determine the frequency and quality of relationships maintained by individuals.

[10] It consisted of flagging the word "participation" as well as other words or expressions associated with active civic behaviour.

[11] A number of terms are used to define this indicator in the social capital literature. The most frequent are civic participation, social engagement, community engagement, civic engagement and community participation.

Indicators frequently associated with social capital include income distribution and a community's level of social cohesion, which is expressed by respect for diversity and pluralism in all its forms.

The key indicators are:

- trust;
- civic engagement (participation in community or political activities); and
- social networks.

Given the importance of the choice of indicators in achieving the second objective of this work, this issue is addressed again in the second report. Nevertheless, it should be pointed out that although there is an abundant amount of social capital research, the same cannot be said for methodological considerations. Furthermore, in research on the links between health and social capital, researchers limit themselves to associating one or two social capital indicators with one health indicator (mortality or self-rated health status). In general, this choice is dictated by the availability of data.

What Is the Valid Unit of Observation of Social Capital?

The literature on social capital is divided between two units of observation: geographic areas (Putnam, 1993) and professional areas (Cohen and Fields, 1998). There is a lack of agreement on the spatial area to be studied. Some researchers maintain that social capital should be assessed at the national level (Fukuyama, cited by Landry, Amara and Lamari, 2001), but the prevailing perspective adopts the region or community as a unit of observation and analysis (Putnam, 1993, 2000). As in the case of the choice of indicators, researchers' observations usually follow the administrative boundaries marked out by the available statistical data. These boundaries do not always correspond to those of actual units of interaction between players, as noted in Landry, Amara and Lamari (2001).

Furthermore, Glaeser (2001) points out that the decision to invest in social capital is made by individuals, not communities. In this sense, to gain a broader understanding of its formation, social capital should be defined at the individual level.

Social Capital and Health Policy

Research associating social capital with health shows that the higher the level of social capital in a community, the better the health status. Strengthening the social capital of communities (and countries) would consequently constitute a promising means of reducing inequality in the area of health.

However, some researchers distinguish two different approaches to the ways decision makers might use social capital (Labonté, 1999). For those who follow the neoliberal doctrine and favour the market to the detriment of the social aspects of society, social capital could be used to justify privatizing, or even reducing public services. For decision makers who advocate social justice and prefer the community aspects of society, social capital would be a goal that involves state intervention to control the market and reduce inequality.

Beyond the two approaches, it appears that there is some consensus on the fact that social capital could be a new form of non-economic public policy tool that has the advantage of using fewer budgetary and regulatory resources (Landry, Amara and Lamari, 2001). No matter which approach is selected, it would be a mistake to underestimate the community's capacity to react to outside intervention. For example, research conducted in Manitoba following the Red River flooding in 1997 demonstrated the positive effect of social capital on the communities' ability to respond effectively to the catastrophe (Buckland and Rahman, 1999). Communities with a higher level of social, human and physical capital reacted more effectively to the flooding. On the other hand, it was these same communities that more forcefully resisted the implementation of public measures.

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Web Sites Related to Social Capital

World Bank, PovertyNet site dedicated to social capital: worldbank.org/poverty/scapital/index.htm

Human Resources and Development Canada, Applied Research Branch, *Prevention of Exclusion and Poverty Reduction:* www.hrdc-drhc.gc.ca/arb/publications/research/exclusion_e.shtml

Fostering Social Cohesion: www.fas.umontreal.ca/pol/cohesionsociale

GPI Atlantic — Genuine Progress Index for Atlantic Canada: www.gpiatlantic.org/

Isuma, Canadian Journal of Policy Research (Issue on Social Capital): www.isuma.net/v02n01/index_e.shtml

Pembina Institute (Alberta Sustainability Trends 2000): www.pembina.org/publications_item.asp?id=34

Policy Research Initiative (PRI): www.policyresearch.gc.ca

Health Canada: www.hc-sc.gc.ca

The Social Indicators Launchpad (access to several research sites): www.ccsd.ca/lp.html

Appendix A

Research Groups and Studies Linked to the Issue of Social Capital in Canada

Research partnerships between the public sector (decision makers and researchers), university research centres, private research centres and the community sector have intensified over the past two years. Examples are the Community-University Research Alliances or the rapprochement between university researchers and policy researchers working in government environments. The following are some of these partnerships in the social capital research sector.

Social Cohesion Network

The Policy Research Subcommittee on Social Cohesion was created in 1996 within the framework of the three research priorities of the Policy Research Initiative (PRI) launched by the government of Canada.[1] The PRI works to strengthen Canada's policy research capacity.

Since 1997, the Subcommittee, renamed the Social Cohesion Network, groups 23 departments and agencies. Its members have only a limited capacity to conduct leading-edge horizontal research, but they have contributed to a greater understanding of the phenomenon.[2] The three main themes of the Network are:

- fault lines;
- axes of identification with the community; and
- repercussions on social cohesion.

It should be noted that the Network has prepared a report on social cohesion indicators in collaboration with the Canadian Council on Social Development.[3]

Research Funded by Health Canada[4]

Annotated Bibliography of Health Determinant Indicators

This bibliography was established in 1999 for the Atlantic and Manitoba/Saskatchewan regional offices of the Health Promotion and Programs Branch (now the Population and Public Health Branch). This document is the first step in the development of a system to evaluate the effects of the work of these divisions. Although the bibliography was initially designed for internal use, it was subsequently updated and made public. It is available at www.hc-sc.gc.ca/hppb/phdd/determinants/

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[1] The two other research priorities are North American linkages and sustainable development.

[2] The Network organizes an annual conference. The 2001 conference was held in December under the theme "Bridging Communities Together."

[3] Canadian Council on Social Development (2000). *Social Cohesion in Canada: Possible Indicators*. Report prepared for the Social Cohesion Network, Department of Canadian Heritage (Strategic Research and Analysis) and Department of Justice Canada (Research and Statistics Division).

[4] Available on the Health Canada Web site at www.hc-sc.gc.ca.

Federation of Canadian Municipalities Project

As part of its project on the quality of life, the Federation of Canadian Municipalities (FCM) developed a series of indicators to measure the quality of life in Canadian cities. The FCM wanted to obtain a global picture of living conditions in these urban areas and determine the trends and issues that might escape conventional methods of assessing the consequences of public policies. In collaboration with a team of authorities from 16 municipalities across the country, the FCM established a series of indicators to measure community well-being. These indicators are:

- community affordability;
- quality of employment;
- quality of housing;
- community health;
- community safety;
- community stress;
- community participation; and
- population resources.

University of British Columbia Social Capital Survey

In 2000, Professors John Helliwel and Richard Johnston, of the Department of Economics and the Department of Political Science, respectively, at the University of British Colombia, undertook the first phase of a survey on social capital. It is a voluminous inquiry composed of 15 modules of questions relating to the following:

- social support (family, friends and neighbours);
- economic security;
- trust and efficacy;
- volunteer work;
- political participation;
- income and employment;
- health, welfare and child care;
- use of the media; and
- ethnic groups, religion and demographic variables.

The second phase of this survey, planned for 2002, will focus on a sample of 4,000 persons and a sample of new Canadians established in Vancouver, Toronto and Montréal.