
1 Introduction to the *Elgar Companion to Social Capital and Health*

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INTRODUCTION

There are many issues to resolve before social capital ideas can be applied practically. For example, what is “social capital”? By what pathways does it work? Do increases in social capital actually cause people’s health to improve? You will find on reading the chapters, each written for this *Companion*, that a wide variety of social science disciplines have been attracted to the promise and the problems of social capital: sociology, political science, economics, epidemiology, psychology, and neurology. These build on the leading contributions from these fields, for example: James Coleman and Nan Lin (sociology); Robert Putnam (political science); Edward Glaeser (economics); and Ichiro Kawachi (epidemiology).

Most of the *Companion* chapters focus on the theoretical or empirical content of social capital issues. Several, however, will benefit people curious about social capital per se. Note that the *Companion* process was open, both when requesting a chapter on a subject or when encouraging authors who have sent chapters to us. Several contributors participated in the International Biennial Workshop of Social Capital and Health which first convened in 2006 and continues to the present. These workshops were organized by Richard Scheffler of the Nicholas C. Petrakis Center on Health Care Markets and Consumer Welfare at the University of California at Berkeley.

Finally, you will notice that the contributors come from wide geographic areas of Europe, North America and Asia. We believe that a side benefit of this diverse collection is the opportunity to compare different analytical approaches of various disciplines and cultures. As an illustration, we begin here by comparing sociology and economics.

From the perspective of sociology, social capital can assume a variety of forms including a network of individuals who interact with each other involving either horizontal ties within the same social group (bonding social capital), ties which cross social divides (bridging social capital) or even ties across the authority or institutionalized power divisions present in society (linking social capital) (Lin, 1999; Aldridge et al., 2002; Putnam, 2000). There is also a social structure perspective that divides social capital into

2 *Elgar companion to social capital and health*

structural social capital – aspects of social structure that can engender social realization of goals; cognitive social capital – common norms, attitudes, beliefs, and values that motivates collective beneficial behaviors and actions; and relational social capital – trust between individuals that helps to create social bonds (Uphoff and Wijayarathna, 2000; Grootaert and Van Bastelaer, 2002). Structural social capital helps to achieve productive ends of groups in society through roles enhanced by various rules and procedures.

Early on, the term social capital took criticism from economists. Robert Solow (1999) and Kenneth Arrow (2000), for example, questioned the idea that social capital is a true capital, one which is accumulated from past economic investment flows minus depreciation of these flows. However, since then social capital empirical research has demonstrated in that it serves as a productive input in health status. The model by Glaeser et al. (2002) demonstrated how social capital functions as a form of capital. It is accumulated over time and it depreciates. But it also shows that social capital research derived from rational choice theory in economics can be extended beyond traditional bounds. For example, the recent work by Richard Thaler in behavioral economics suggests opportunities to better understand how social capital influences peoples' decision-making about health (Royal Swedish Academy of Sciences, 2017).

The economic literature generally divides social capital into two categories. There is a community-level phenomenon – a collective resource used to attain common goals that would be unachievable by individuals operating by themselves or their own social connections. These collective resources might include community centers, religious organizations, and other clubs that have been established to promote social cohesion (Holt-Lunstad et al., 2015). Secondly, there is individual-level social capital – personal networks or structures which can strengthen individual social bonds (Glaeser et al., 2002).

Further discussion of comparisons of disciplines such as this sketch between economics, sociology and others, are developed in the six sections of the contributions which follow.

Part I Theories on How Social Capital Improves Health

The three chapters in this section offer: definitions and basic theory; a history of social capital; an examination of real life ideas and instances that show the essence of social capital.

Chapter 2 How does social capital contribute to health?

In this chapter, Sherman Folland introduces social capital concepts and explains the main hypotheses described in the economic approach. Health

economists develop multivariate regressions where several of the independent variables are chosen to represent social capital. The dependent variable is chosen to represent health. Various covariates are included to adjust for extraneous factors.

Chapter 3 History of social capital and health

M. Kamrul Islam led a group of top co-researchers (Juan Merlo, Ichiro Kawachi, Martin Lindström and Ulf-G. Gerdtham) in 2006 to develop the history of social capital as it pertains to health. Here, besides bringing this history of how social capital ideas developed up to the present, Islam searches for and finds the first instance of the use of the phrase “social capital”. He also identifies the social capital researchers who first applied the modern usage.

Chapter 4 How social capital arises in areas

Tor Iversen and Tigist Woldetsadik Sommeno expand on an earlier article (Folland and Iversen, 2014), bringing into view the many studies since then. These include the relationship of social capital to one’s age, ethnicity, gender, education and other categories described in recent findings. Of particular note the authors sort out the complexity of the studies on income inequality and its effect on social capital. One study finds no relation between inequality and trust; yet another finds a negative correlation between social capital and inequality. In one study of kindergarten children it was found that these young girls are more trusting than boys.

Part II Special Inquiries on Social Capital and Health

Two chapters, which get findings of interest, seemed to fit best in a special section. The first focuses on the question of social capital changes and effects over an individual’s age in years. The second compares the health and social capital effects of religious practice.

Chapter 5 Social capital and health across the life cycle

Eric Nauenberg applies the life-cycle explanation of models by Modigliani (Modigliani and Brumberg, 1980) and by Glaeser et al. (2002) to guide investment in the social services available to people, especially the elderly. Do people invest in their own social capital so that it will be there when needed? The author identifies four pathways by which social capital benefits the elderly: providing information; reducing stress; developing personal responsibility; and social groups acting in concert.

Chapter 6 Religious and social capital and health

Ephraim Shapiro and Chen Sharony explain the correlation of religious practice and social capital as well as the concepts of religious capital. The remarkable benefits of religious practices are well-documented here. Reduced mortality rates, better mental health, health status and social capital are all gains of religious practice. They report that social capital in American towns is primarily that which is associated with places of worship. The authors also define religious capital and demonstrate that it too has healthful effects.

Part III Empirical Evidence: Does Social Capital Improve Health?

Of the growing number of papers on social capital and health, the ones based on empiricism are of most interest. This part finds that a wide variety of studies meet this standard. The section that follows this one addresses the acid test of causality.

Chapter 7 Social capital in epidemiology

Inspired by Putnam's study of Italy, Martin Lindström develops applications that test the issue of social capital and health in the context of social epidemiology. Three central concepts are explained. The chapter attends to the technical issues including, for example, the portion of children in subgroups identifying conflicts. Lindström then comes to his main message: the value of longitudinal experimental design. The chapter presents several longitudinal cases that the author recommends.

Chapter 8 Social capital and aging brain health

Nicole D. Anderson researched the neurological science of the genetic factors of dementia or Alzheimer's disease. The author, after describing the variety of genes and their risks, then reports on the "huge array" of lifestyle, environment and social capital factors that modify this risk. These factors, including the physical, social and cognitive conditions, are enumerated. Social capital deficiencies also enter this picture: low social capital, low social activity, living alone and more. Anderson suggests that neurological research complements other social capital studies, which presents new opportunities for research.

Chapter 9 Social capital and types of illness: where is it most effective?

We look at the relationship of social capital with a variety of illnesses. This chapter, by M. Kamrul Islam, Sherman Folland and Oddvar Martin Kaarbøe, compares samples from the US and Norway that suggest a strong connection between the stress reduction effects of social capital and the

incidence among the 18 various diseases studied. Even diseases like asthma have a stress component that is negatively correlated with social capital.

Chapter 10 Social capital and risk-taking behavior

A common idea is that rebellious and risk-taking people will reduce serious health dangers, and even death, when they find a long-term mate, have children to care for, find happiness outside of the risk-taking, and so on. Sherman Folland presents a simple mathematical model of social capital in which one's utility increases when there is a gain in social capital. The risky gamble becomes less attractive when the person has "more to lose". A graphical extension adds money and resources so that the risk of loss affects the trade-off between money and the now more adverse "bad". The review of recent empirical evidence for cigarette smoking, illegal drugs and alcohol offers support on this idea.

Part IV Causality Issues

Do increases in social capital actually cause the observed improvements in health? Research on this question has found some positive answers as well as some complications.

Chapter 11 Social capital and health interventions: enhancing social capital to improve health

The authors Jean Guo, Setti Raïs Ali and Lise Rochaix engage in the question of causality in a realistic and practical way by reviewing community interventions and their effects. These provided one or more of the following: health information; environmental adaption; social support; interpersonal influence. The large numbers of specific interventions chosen were each found as potentially improving social capital. The program's reports often tell of health or related gain. These are more informal than the statistical analyses one typically sees. However, each of these interventions is doable and it makes common sense to consider them closely. The interventions studied address medical conditions that are important to society, including chronic conditions such as HIV management, addiction and mental health.

Chapter 12 Does health affect social capital?

Hope Corman, Kelly Noonan and Nancy E. Reichman have published successfully and frequently on the effects of child and maternal health on social interaction, even on paternal criminal behavior. The present chapter reviews this work and connects it with general social capital literature. A further value of this chapter comes from the exogenous nature of the post-partum illness or

the new babies' problems. These problems then clearly have effects on one's social capital and in turn on one's health, the reverse of our usual finding.

Chapter 13 Trust promotes health: addressing reverse causality by studying children of immigrants

Past studies have shown that trust measures are clearly and positively correlated with good health. The problem for research, however, lies in the uncertainty over whether trust actually causes the better health or whether the reverse is true. Martin Ljunge applied his design to solve this problem. Focusing on the health of very young children and finding that the mother typically carries the trust for the children, he gathered trust measures both in the present country as well as in the mother's country of origin. Thus, trust becomes exogenous to the current problem. This exogenous trust measure was significant and beneficial in the children's health.

Chapter 14 Workplace social capital and sickness absence

This chapter by M. Kamrul Islam and Lorenzo Rocco contributes to a clearly important area of social capital research. The authors experimented and applied modern econometrics, including one of instrumental variables, to derive results on causality. Social capital of the workplace reduces worker absences due to sickness and several causes.

Part V Sociology and Social Capital

Sociology presents contrasts in how to develop social capital for health. For example, Spencer Moore and colleagues describe the social capital variables of "strong influences" and others as "weak influences". Lijun Song emphasizes network resources, such as income.

Chapter 15 Network approaches to the study of social capital and health

The authors Spencer Moore, Stephanie Child, Yun-Hsuan Wu and Jennifer Mandelbaum explore the basis of the sociology of networks. For example, weak ties are best to convey social capital, while strong ties like family members or close friends are not as effective in generating benefits. Their chapter applies these concepts and others to describe cases of health interventions that result in increased physical exercise, as well as reduced problem drinking, smoking, obesity and improved mental health.

Chapter 16 Do network members' resources generate health inequality? Social capital theory and beyond

Lijun Song, Cleothia G. Frazier and Philip J. Pettis provide a thorough grounding in Bourdieu (1986) and Lin (2001). The application of sociology

to networks then brings some novel outcomes. While network resources generally bring positive effects on health and wellbeing, the social relationships within the network could bring negative effects. These researchers describe, for example, how competing subgroups can develop for the resource. The authors explain results contrary to the usual intuitive outcome. They also explain the effect of circumstances that limit the “reachability” of one’s desired goals.

Part VI Social Capital and Health in World Development

Chapter 17 Social capital and health inequalities in developing countries: a case study for Indonesia

Florence Jusot and Marta Menéndez open with a thorough review of the literature on the health effects of social capital in a large collection of countries, especially in developing countries like Indonesia, on which they focus. Their study includes many innovations and new findings. For example, they find that inequalities in health opportunities account for 10 percent of inequalities in health.

Chapter 18 Social capital and economic growth

While investing in social capital costs time and effort, Soumyananda Dinda fills the missing part: social capital develops human knowledge and health capital, which creates economic growth. The author also provides thorough supporting literature.

Conclusion

We are grateful to the authors from many academic disciplines who have contributed their findings and discussions to this *Companion*. They are on the leading edge of a robust scientific inquiry into the effect of social interaction on the lives and health of humans. In addition to the results they present, their work suggests more ideas to test, policy implications to explore, and directions in which to expand this interdisciplinary research. We are pleased to gather their work into this *Companion*.

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