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Social capital and health and well-being in East Asia: A population-based study☆

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Abstract

How individual-level social capital relates to adult health and well-being was examined using data from a cross-sectional interview survey in East Asia (Japan, South Korea, Singapore, five areas in Mainland China, and Taiwan) in 2002–2004. The number of self-reported somatic symptoms, subjective health satisfaction, life satisfaction and social capital indicators, as well as socioeconomic status (SES), were analyzed by a logistic regression model. Adjusting for SES, social capital measured by belonging to organizations and weakness in ''norms of reciprocity'' were related to a greater number of self-reported somatic symptoms ($p < 0.001$ for both). Lack of trust in organizations ($p < 0.001$) and of a person to consult ($p = 0.012$) were related to poor health satisfaction. Lower ''interpersonal trust'' ($p = 0.016$), *weakness in* ''norms of reciprocity'' ($p < 0.001$) and lack of trust in organizations ($p < 0.001$) were related to poor life satisfaction. Gender inequality was observed across countries, but the relationships varied according to the health indicator. Specifically, self-reported somatic symptoms were more numerous and health satisfaction was worse in women ($p < 0.001$), but life satisfaction was worse in men ($p = 0.017$). The analyses provide evidence that dimensions of social capital are positively associated with self-reported somatic symptoms and overall well-being in East Asian countries.

Keywords: Self-reported somatic symptoms; Health satisfaction; Well-being; Social capital; East Asia; Population-based survey

Introduction

During the last decade, the effects of social capital on health have attracted attention in the field of public health. Following the influential work of Putnam (1993), ''social capital'' is defined in terms of trust, norms of reciprocity, and social networks. Although there has been important conceptual revision of theories of social capital and there is no a single unified or generally accepted theory, most conceptualizations of social capital include both ''structural'' and ''cognitive'' aspects. The structural dimension is characterized by behavioral manifestations of network connections, such as membership in voluntary organizations. The cognitive dimension reflects attitudes, such as general trust in people and ''norms of reciprocity''. For a better understanding of the theoretical concept of social capital, it is necessary to break down the concept of social capital into two levels, i.e. at the micro level (of the individual) and of the aggregated (area or nation state level). At the individual level, social capital refers to the network to which an individual belongs. Individuals

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derive benefits from knowing others with whom they form networks of interconnected agents. An ecological societal construct rather than a characteristic of individuals is considered at the aggregated (group) level. Social capital in this sense is a resource of a group of people.

Although the findings vary in strength, and ambiguities regarding conceptualizations and measurement of social capital remain, social capital has been closely linked to health in general populations (Kawachi & Berkman, 2000). The relation of social capital with health may be affected by culture. As shown in a review by Kawachi, Kim, Coutts, and Subramanian (2004), to date, many studies of social capital were based on data from the US and European countries. Very few studies have been conducted among Asian people (Yip et al., 2007).

In this paper, I focused on social capital at the individual level. The present study aimed to investigate the effects of social capital on individual health in East Asian countries based on results of a population-based survey. The study question was ''Are social capital and socio-economic status (SES) associated with health and well-being in East Asia?'' Based on the findings, information regarding the extent to which the concept of social capital can be transferred to East Asian countries can be used to suggest policy recommendations in a way similar to those in Western countries. The secondary objective of this study was to examine gender inequality in health and well-being in East Asia after adjustment for social capital and SES.

Social capital and health and well-being

A variety of health outcomes and measures of well-being have been linked to the structural and cognitive dimension of social capital. The structural dimension of social capital as indicated by organizational memberships (number of organizations to which people belong) and the cognitive dimension of social capital, which is indicated by general trust in people (''interpersonal trust'') and ''norms of reciprocity'', have been associated with mortality, life expectancy, and self-reported health status and well-being (Kawachi et al., 2004; Mitchell & Bossert, 2006). Some reports have been based on analysis at the individual level (Poortinga, 2006) and others at the aggregated level (Kawachi et al., 2004; Muntaner & Lynch, 2002). For instance, measures of social capital and individual indicators such as ''interpersonal trust'', ''norms of reciprocity'', and civic associations (organizational membership) used in the General Social Survey (James & Smith, 2002) have been studied in relation to health (Kawachi & Kennedy, 1997; Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997, for instance). Recently, Veenstra (2000, 2005) examined the relationship between self-reported health and social capital indicators determined from individual responses to items addressing civic participation, trust in government, trust in neighbors, trust in people from the community, and trust in people in general. The results of a cross-sectional survey of randomly selected adults in Saskatchewan, Canada, showed that those indicators were not related to health status. On the other hand, associational involvement and/or ''interpersonal trust'' were reported to be related to health in studies from Australia (Baum & Ziersch, 2003) and Russia (Rojas & Carlson, 2006) as well as USA (Kawachi, 1999). Yet the findings vary in strength depending on the conceptualization and measures of social capital, SES and demographics of the study population. Many studies have indicated that social capital indicators have been associated with health and well-being as shown in the review by Kawachi et al. (2004). Recent work by Yip et al. (2007) empirically examined relationships between social capital and health and well-being in rural China. They indicated that cognitive social capital (i.e., trust) is positively associated with three outcome measures at the individual level and also with psychological health and well-being at the village level. However, very few studies have been performed in Asian countries. Furthermore, it has been increasingly acknowledged that social capital is an important determinant of health and overall well-being, and a national-level study including countries from Europe, North America, and Asia found an index of social capital to be positively associated with satisfaction with life (Bjornskov, 2003). Helliwell and Putnam (2004) found using cross-national data from the World Values Survey from the United States and Canada that civic engagement, trust, and social ties were all independently associated with health and act through health on well-being.

The present study is the first study using a population-based sample survey in East Asia, employing the same questionnaire in each country or area to measure social capital in a comprehensive manner and examine both health and well-being as outcome variables.

Data and analysis

Study population and sample surveys

Data were collected from cross-national surveys conducted in Japan, South Korea, Singapore, five cities