Social Capital and Self-Rated Health Status:
Urban China in the 1990s

by

Qing Xiao

Utah State University

Young Tae Cho

Utah State University

Corresponding author: Qing Xiao, Department of Sociology, Anthropology, and Social Work, 0730 Old Main Hill, USU, Logan, UT 84322, USA. Email: qxiao@cc.usu.edu Tel: 1-435-797-1230; Fax: 1-435-797-1234

Abstract

Using the World Value Survey data collected in 1993 and 1997 from eleven provinces and municipalities in China, this study will explore the specific mechanisms on how social capital is associated with individual health measured by self-rated health status in the 1990s' Chinese urban areas. Authors will focus on family-centered networks, sense of belonging to the community of different levels of economic development, and perceived neighborhood characteristics. Three hypotheses will be attested: (1) It is the family-centered networks rather than the secondary association participation that have significant effects on self-rated health status; (2) Perceived neighborhood characteristics have significant health related effects on individuals; (3) Despite the economic disparities in Chinese urban areas, individual health status do not necessarily differ too much. Additional models will also be employed to examine the possible causal relationships between any other social factors such as SES and health change style in the 1990s.

INTRODUCTION

Social capital, when measured at individual-level, can be defined as a personal stock which includes the supportive networks and assets that family pass on to the individuals (J Walkup 2003; Henderson et al. 2003), the psychological sense of the community (Kawachi 2000) such as the perceived neighborhood environment, or a sense of belonging to the community (Fawcett et al. 2000). For some social capital theorist, social capital is fundamentally a private good despite of its significant social effects (Mclean et al. 2002, p.6) which can be produced as a means of achieving specific goals (Rose 2000).

Generally speaking, individual-level measurement shows little connection between the social capital of participation in secondary associations and self-rated health (Veenstra 2002). In Russia, it was reported that those who are involved in informal networks are more likely to have worse emotional health, because retreating from formal organizations will leave the individuals with “emotional scars” (Rose 2000). On the contrary, those who are more certain of having someone to rely on in time of illness are better in terms of both physical and psychological health (Rose 2000). Another individual-level research also found that the social involvement in the clubs and associations that respondents currently belong to were unrelated to individual’s health (Veenstra 2000). Some argue that the type and nature of various kinds of social involvement and associations should be explored (Veenstra 2000). An internally homogeneous association may have less information to be exchanged due to too much similar information in the association (Grootaert 2002, p.48). According to Grootaert, social cohesion can be largely embedded in specific culture and history rather than coming from the outside such as various kinds of

memberships (Reid & Salmen 2002, p.92). It is argued that social capital rich communities may influence individual's health through pathways other than networking, and may receive support from family members and close friends, although such relationship is not significant enough (Veenstra 2000).

Previous research has proved the positive neighborhood socioeconomic qualities are good for individual health status (Coleman 1988; Drukker et al. 2003; Aneshensel et al. 1996; Fitzpatrick et al. 2000; Kawachi et al. 2000; Browning et al. 2002). Neighborhood disadvantages can predispose residents to the harmful conditions (McCulloch 2003; Ross et al. 2001; LeClere et al. 1997; Robert 1998, 1999; McCulloch 2003). Recently, in addition to the objective socioeconomic measurement at the neighborhood level, social capital of neighborhood has been advanced to emphasize the subjective assessment of the residents of the neighborhood environment (Portes 1998; Portes et al. 1993; Drukker et al. 2003; Cho et al. 2003). It is argued that the places occupied by individuals are also mental constructs, psychologically defined by individuals who possess culture and occupy positions within society (Fitzpatrick et al. 2000, p.9). Daily exposure to a threatening and noxious environment may erode health. Living in disordered neighborhood, people may feel afraid and be less likely to walk out for pleasure, exercise, or transportation (Ross and Mirowski 2001). This sense of insecurity is related to health independent of the causal relationship between crime and health (Lindstrom et al. 2003; Ross and Mirowski 2001). At the same time, biological facts have shown that a threatening environment can produce physiological responses like adrenal hormones which will directly undermine health (McCulloch 2003; Taylor et al. 1997; Ross and Mirowski 2001).

Community economic conditions have been argued to influence individual health significantly over and above other individual characteristic. Compared with affluence which has been testified to exert strong contextual effects on self-rated health by sustaining neighborhood social organization which in turn positively affects health status (Brooks-Gunn et al.1993) except for some urban samples (Wen et al. 2003), poverty is not consistently proved to have negative interaction with individual health. Contextual effects of poverty have not been found in various articles on health-related behavior, psychiatric morbidity and adverse fertility events after adjustment for individual compositional effects (Sloggett et al.1994; Browning et al. 2002; Wen et al. 2003). It is argued that the measurable indicators of what constitutes a health-enhancing community should be explored to a greater extent because neighborhood economic contextual effect might work through social resources to affect health status (Wen et al. 2003; Drukker et al. 2003； Baron et al. 2000, p.182)). Furthermore, in the economically disadvantaged communities, a sense of belonging to the community may reduce stress which is produced due to fighting with poverty (Fawcett et al. 2000) and thus increase the health-enhancing service access. Meanwhile, close family ties, mutual aid and voluntarism are often strong features of poor communities which can also improve physical and mental health. Empirical study has proved that the statistical relationship between material deprivation and poor health is weakened by controlling for variation in community social capital (Harries 2002, p.184).

THE CASE OF CHINA

During the 1990s, a spur of economic growth and wealth creation has been spread in an unprecedented pace in Chinese history with an annual economic growth rate of nearly 10 per

cent. Accompanied this economic growth is the rapid urbanization in the 1990s. The non-agricultural population size in urban areas has increased from 172 million in 1978 to 296 million in 1990, 348 million in 1995 and 370 million in 1997 (Banister 2002, p.66). But great economic divergence has also existed between the highly urbanized coastal zones and the poorly urbanized interior. According to the per capita GDP in 1994, the fourth richest province Liaoning's per capital GDP was 3.87 times that of Guizhou which was the poorest region (Cook 2000, p.47-51). Those cities or provinces in east-coast areas are much more affluent than the inland provinces or cities, particularly in the west regions. Concerning the health variations, disparities are generally large between rural and urban areas, but not so much across urban areas. Actually a large portion of urban residents was covered by some kind of social insurance in the1990s. Furthermore, the health-related resources such as food, health care facilities, education and income may be more equally distributed across cities. To clarify the plausible small health disparities across urban regions of different level of economic development, more empirical research is needed, especially in the case of China.

Family is considered as the fundamental unit of society in China. The individual relationships are nurtured and maintained mostly through familiar acquaintance rather than through organizations (Chen 2001). It is even concluded that Chinese society has little social integration beyond family, clan, and personal relationships (Rotberg 2001, p.379). Furthermore, family is given a moral dimension which acts as a natural working unit to serve as "the prototype for a broader societal network of morally binding, mutually dependent relationships" (Chen 2001, p.21). Unlike most Western societies, Chinese families form the basis of most secondary and

unofficial associations and provide an alternative means for finding jobs, housing, health care, and various goods. It is a cultural fact that reliable information such as health-related services or policy usually do not come from official channels, but are provided by these kinds of family or family-extended networks. Available efforts should be employed on the connections between this specific social network in Chinese society and its influence on individual health status.

RESEARCH QUESTIONS

Few studies have investigated the connections between social capital and self-rated health status, especially attributed to unique characteristics of Chinese society (Wen et al. 2002). Our findings contributing to this literature will suggest that in Chinese urban society there may have some connections between its specific forms of social capital and individual self-rated health status, especially in terms of family-centered networks, perceive neighborhood characteristic, and sense of belonging to communities in different economic environments.

The hypotheses we will explore in this research are as followings.

I. What is the relationship between family-centered networks and Chinese self-rated health status? While many articles have proved that the secondary association participation is positively or negatively connected with individual's health status, we are tying to argue that in Chinese society it is the family-centered networks instead of any association memberships that conduce to health-enhancing outcomes. From the data we will employ in this study, respondents who choose "family" as their "very" or "quite" important thing in life are extraordinary high (97.2 per cent in 1997 and 92 per cent in 1993), compared to any other dimensions of society such as "friends", "leisure" or "political". On the other hand, data has shown that very few

Chinese people belong to any kinds of associations or organizations, even for “sports” groups. We hypothesize that there may be some specific connections between Chinese health and their culture of family-centered networks.

II. What is the relationship between respondents’ perceived neighborhood and their individual health status? Most respondents in both 1993 and 1997’s surveys were reported to care much about having socially disadvantaged persons as their neighbors. Compared with 1993, a higher proportion of respondents in 1997 survey answered that they mind being neighbors with these disadvantaged persons. “Criminals”, “drunks”, “emotional unstable person”, “drug addicts”, “people with AIDS” and “homosexuals” are among the most disliked perceived neighborhoods. Empirical researches have proved that there are relationships between individuals’ perceived neighborhood and their health status (Cho et al. 2003). So what we will explore here in this article is to testify this hypothesis in the case of Chinese urban areas in the 1990s.

III. What is the relationship between the sense of belonging to the community in different economic environment and individuals health conditions? As the world’s largest and quickest developing country, urbanization and areas development are greatly diverse in China. But that does not mean that access to health-enhancing social resources is much different among economically different areas. We will hypothesis that to some extend the sense of belonging to community will improve the individuals’ opportunities to access to health resources or basic conditions that affect health, especially in Chinese urban regions. We are told from the preliminary analysis of the data employed in this study that although family relationships are among the most important social ties in Chinese society, more people still think they firstly

“belong to the town or region” rather than “belong to the nation as a whole”. Collectively sharing resources in the community is still a basic cultural tradition in most Chinese urban areas, independent of the various economical development levels. So we argue that even in the relatively poor urban communities in China, people are not too different from those in rich areas in sharing health-enhancing services and amenities, and thus their health status are not too different from those in affluent regions.

DATA AND METHODS

Data for this research is from the World Value Survey (WVS), a serial crossnational comparison of values and norms from 1980 to 1997. Respondents from more than 50 countries were asked about a wide variety of topics concerning their values and attitudes about the global changes. Questions connected with the effects of social capital include: the groups and associations people belong to, allocation of resources, trust, perceived neighborhoods, religious behavior and beliefs, etc. Self-rated health status and proxy psychiatric health status (such as “happiness”) were also included.

The survey data on Chinese part was collected respectively in 1993 and 1997, and both national random and quota sampling were used. The population was undersampled with 90 per cent urban citizens who were over 18 and a large portion of illiterate population was excluded. But weight variables at the end of the questionnaire were included to correct for the age and education level. The survey for China was constructed by stratified multi-stage random sampling, in which firstly the provinces were stratified according to three economic development levels. Within each of these three strata, several provinces were then randomly selected. Population

sampling points in each stratum were about 100. So, we have 1,000 respondents in the 1993's WVS, and 1,500 in the 1997's WVS.

The major dependent variable in this research will be the self-rated health status (V83 in 1993 and V11 in 1997). Independent variables include life importance preference, organizations and activities belong to, perceived neighborhood characteristics, trust among people, feeling of recent life, etc. Other SES or demographic variables will be included in the analysis. They are marital status, perceived social class, income level, age and education attainments. As for the measurement of community economic conditions, we will recode all those 11 provinces and municipalities into a trichotomous variable based on their relevant GDP in each year-period, with each category represents specific level of economic development. Scales of this categorization have been provided by the WVS.

References:

Aneshensel, Carol S., & Sucoff, Clea A. 1996. "The Neighborhood Context of Adolescent Mental Health". *Journal of Health and Social Behavior.* 37: 293-310.

Banister, Judith. 2002. "*Economic Security Issues"*. China's Integration In Asia. (edited by Ash, Robert) Curzon Press.

Baron, Stephen., Field, John., & Schuller, Tom. 2000. *Social Capital.* Oxford University Press.

Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K., & Sealand, N. 1993. "Do neighborhoods influence child and adolescent development?". *American Journal of Sociology*. 93 (2), 353-395.

Browning, Chrisopher R., & Cagney, Kathleen A. 2002. "Neighborhood Structural Disadvantage, Collective Efficacy, and Self-Rated Physical Health in an Urban Setting". *Journal of Health and Social Behavior.* Vol 43 (December): 383-399.

Cook, Ian G. 2000. "*Pressures of Development on China's Cities and Regions".* China's Economic Growth: The Impact on Regions, Migration and the Environment (edited by Cannon, Terry.). MaCmillan Press Ltd.

Chen, Ming-Jer. 2001. *Inside Chinese Business*. Harvard Business School Press.

Cho, Youngtae., Park, Gil-Sung., & Echevarria, Samuel. 2003. "Perceived Neighborhood Characteristics and the Health of Adult Koreans*". Being sent for publication.*

Coleman, J. S. 1988. "Social Capital in the creation of human capital". *American Journal of Sociology*. 94, s94-s121.

Drukker, Marjan., Kaplan, Charles., Feron, Frans., & Os, Jim van. 2003. "Children's health-related quality of life, neighborhood socio-economic deprivation and social capital. A contextual analysis". *Social Science &Medicine* 57: 825-841.

Fawcett, Stephen B., Francisco, Vincent T., Hyra, Derek., Paine-Andrews, Adrienne., Schultz, Jerry A., Russos, Stergios., Fisher, Jacqueline L., & Evensen, Paul. 2000. "*Building Healthy Communities*". The Society and Population Health Reader, Vol. II. (edited by Tarlov, Alvin., & Peter, Robert F. ST.). The New Press.

Fitzpatrick, Kevin., & LaGory, Mark. 2000. *Unhealthy Places*. Routledge.

Grootaert, Christiaan. 2002. *"Quantitative Analysis of Social Capital Data".* Understanding and

Measuring Social Capital. (edited by Grootaert, Christiaan., & Bastelaer, Thierry Van.) The World Bank Press.

Harries, John. 2002. *Depoliticizing Development: The World Bank and Social Capita*l. Anthem Press.

Henderson, Scott, Whitford, Harvey. 2003. "Social capital and mental health". *The Lancet*. Vol 362. August 16, p.505-6.

Kawachi, Ichiro. 2000. "*Social cohesion and health".* The Society and Population Health Reader. Vol.II (edited by Tarlov, Alvin R., & Peter, Robert F. ST.). The New Press.

Kawachi, Ichiro., & Berkman, Lisa. 2000 "Social Cohesion, Social Capital, and Health". Social Epidemilogy . (edit by Berkman, L. F., & Kawachi, Ichiro) Chap 8. Oxford University Press. P.174-188.

LeClere, Felica B., Rogers, Richard G., & Peters, Kimberley D. 1997. "Ethnicity and Mortality in the United States: Individual and Community Correlates". *Social Forces* 76: 169-98.

Lindstrom, Martin., Merlo, Juan., & Ostergren, Per-Olof. 2003. "Social capital and sense of insecurity in the neighborhood: a population-based multilevel analysis in Malmo, Sweden". *Social Science &Medicine* 56: 1111-1120.

McCulloch, Andrew. 2003. "An examination of social capital and social disorganization in neighborhoods in the British household panel study". *Social Science &Medicine* 56: 1425-1438.

McLean, Scott L., Schultz, David A., & Steger, Manfred B. 2002. "*Introduction".* Social Capital. (edit by McLean, Scott L., Schultz, David A., &Steger, Manfred B) New York University Press.

Portes, A. 1998. "Social capital: Its origions and applications in modern sociology". *Annual Review of Sociology*. 24, 1-24.

Portes, A., & Sensenbrenner, J. 1993. "Embeddedness and immigration: Notes on the social determinants of economic action". *American Journal of Sociology*. 1320-1350.

Reid, Catherine., & Salmen, Lawrence. 2002. *"Qualitative Analysis of Social Capital: The Case of Agricultural Extension in Mal"i.* Understanding and Measuring Social Capital. (edited by Grootaert, Christiaan., &Bastelaer, Thierry Van.) The World Bank Press.

Robert, Stephanie A. 1998. "Community-level Socioeconomic Effects on Adult Health". *Journal of Health and Social Behavior.* 39: 18-37.

Robert, Stephanie A. 1999. “Socioeconomic Position and Health: The Independent Contribution of Community Socioeconomic Context”. *Annual Review of Sociology 25*: 489-516.

Rose, Richard. 2000. “How much does social capital add to individual health? A survey study of Russians”. *Social Science &Medicine* 51: 1421-1435.

Ross, Catherine E., & Mirowsky, John. 2001. “Neighborhood Disadvantage, Disorder, and Health”. *Journal of Health and Social Behavior.* Vol.42 (September): 258-276.

Rotberg, Robert I. 2001. *Patterns of Social Capital.* Cambridge University Press.

Sloggett, A., & Joshi, H. 1994. “Higher mortality in deprived areas: Community or personal disadvantage?” *British Medical Journal*. 309 (6967), 1470-74.

Taylor, Shelley., Repetti, Rena L., & Seeman, Teresa. 1997. “Health Psychology: What is an Unhealthy Environment and How Does it Get Under the Skin?” *Annual Review of Psychology* 48: 411-47.

Veenstra, Gerry. 2000. “Social capital, SES and health: an individual-level analysis”. *Social Science &Medicine* 50: 619-629.

Veenstra, Gerry. 2002. “Social capital and health (plus wealth, income inequality and regional health governance)”. *Social Science &Medicine* 54: 849-868.

Walkup J., 2003. “Concepts of social capital”. *Bri J Psychiatry*; 182:458.

Wen, Ming., & Luo, Ye. 2002. “Can we afford better health? A study of the health differentials in China”. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine.* Vol.6. No.4. 471-500.

Wen, Ming., Browning, Christopher R., & Cagney, Kathleen A. 2003. “Poverty, affluence, and income inequality: neighborhood economic structure and its implications for health”. *Social Science &Medicine* 57: 843-860.