

Chapter 5

Contextual Determinants of Community Social Capital

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In this chapter, we summarize current progress in the study of determinants of community social capital. Given that many studies have reported a positive association between social capital and health (and many other outcomes), why are some communities richer in social capital than others? Compared to the studies on the health *effect* of community social capital, less attention has been devoted to understanding the *determinants* of community social capital. Recently, researchers have examined the influence of area characteristics, such as degree of urbanization/suburbanization, neighborhood walkability, and community history on the accumulation of community social capital. Traditional urban centers have been hypothesized to be more walkable, and walkable built environments may help form a more sociable neighborhood community. In the following section, we describe how these hypotheses have been tested, with a particular focus on the case studies conducted in Japan. Subsequently, we will discuss some further challenges and policy implications regarding the studies of the contextual determinants of community social capital.

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5.1 Analytical Framework of Social Capital and Its Determinants

Parallel approaches have been used in social capital theory, the individualistic approach stems from sociology, and the collective approach originates in political science. The former considers social capital in relation to the characteristics of individuals, while the latter considers social capital as the product of the features of community (i.e., neighborhood, town, school, or workplace). Since the publication of influential books by the political scientist, Robert D. Putnam (Putnam, 1993, 2000), many researchers have taken the second approach, focusing on the *contextual* effects of community social capital on a variety of outputs/outcomes for both individuals and communities.

Putnam (2000) stated that “of all the domains in which I have traced the consequences of social capital, in none is the importance of social connectedness so well established as in the case of health and well-being.” (p. 326) In the field of public health and social epidemiology, many empirical studies have tested whether or not social capital can explain variations in population health. Although many authors have analyzed the effects of individual social capital on the health of individuals (i.e., traditional risk factor studies), some have tried to reveal the contextual effects of community social capital on health.

The Roseto story (Bruhn & Wolf, 1979) is a classic study demonstrating the putative influence of community social capital on population health. Unusually low rates of cardiovascular disease in Roseto, compared to surrounding communities, were said to be explained by the unusually cohesive social relationships of the town residents, which had been originally settled by Italian immigrants from southern Italy beginning in the 1880s. After many years, Kawachi, Kennedy, Lochner, and Prothrow-Stith (1997) used an ecological analysis to “rediscover” the importance of community-level social capital in explaining the linkage between income inequality and population health. Kawachi et al.’s paper has been cited nearly a thousand times (according to Web of Science’s citation index) and has influenced the direction of studies on social capital and health.

Numerous studies have tried to link collective social capital to a variety of health outcomes, including mortality (Lochner, Kawachi, Brennan, & Buka, 2003; Martikainen, Kauppinen, & Valkonen, 2003; van Hooijdonk, Droomers, Deerenberg, Mackenbach, & Kunst, 2008), self-rated health (Kawachi, Kennedy, & Glass, 1999; Kim, Subramanian, & Kawachi, 2006), mental health (Lofors & Sundquist, 2007), and health behaviors (Kim, Subramanian, Gortmaker, & Kawachi, 2006; Poortinga, 2006). In many of the studies on collective social capital, community-level social capital was measured by aggregating the responses of the residents in the community, e.g., the rate of those who answered “Yes” to the question of general trust (i.e., Would you say that most people can be trusted?) or to questions about the respondents’ participation in organized activities like sports clubs or neighborhood associations. In short, the places where many people have a trust in their neighbors or where they participate in community organizations are considered to have a high level of community social capital.

Although much attention has been directed toward demonstrating the contextual effects of community social capital on health outcomes, scant attention has been devoted to understanding the determinants of community social capital (Kaasa & Parts, 2008; Wood & Giles-Corti, 2008). In other words, a major focus of social capital research has been to test whether or not neighborhoods or community-level variations in the indicators of social capital can explain geographical variations in health outcomes, but far less attention has been paid to explaining the geographical variations in the indicators of social capital.

Understanding the determinants of community social capital is important to both academic and policy research agendas. Even if community social capital is found to be a key explanatory factor in population health, it does not necessarily mean that we can improve population health through interventions on the social capital conditions. Without knowing the determinants of social capital and possible intervention, the significance of community social capital for policy making will remain limited and ambiguous. Given that many previous studies have reported a positive association between social capital and health, examining why some communities are richer in social capital than others is important for improving public health (Leyden, 2003).

When considering the concept of social capital, and its determinants, compositional and contextual aspects need to be distinguished. The question, “Why are some communities more sociable than others?” turns out to have multiple levels. At the individual level, characteristics such as educational attainment, marital status, age, gender, income, and employment status are associated with degrees of trust and civic participation (Groot, Maassen van den Brink, & van Praag, 2007; Huang, Maassen van den Brink, & Groot, 2009; Kaasa & Parts, 2008). For example, income and education are basically related to higher social capital (e.g., Kaasa & Parts, 2008; Subramanian, Lochner, & Kawachi, 2003). Thus, in areas where many people reside with high socioeconomic status, the communities tend to have rich social capital, determined by the compositional effects of the residents.

Nevertheless, residual variation exists in the community social capital even after controlling for the individual characteristics of residents (Lindström, Merlo, & Ostergren, 2002; Subramanian et al., 2003). This implies that it is not sufficient to inquire only about the characteristics of individual residents that produce area variations in social capital; we also need to examine contextual determinants of social capital along with the individual-level determinants (Fig. 5.1). As mentioned above, since community-level social capital is usually measured by aggregating individual responses, the model that explains the determinants of community-level social capital resembles the model that explains individual-level social capital.

As for the contextual determinants of social capital, several factors have been implicated so far. In this chapter, we will focus on (a) the degree of urbanization/suburbanization; (b) neighborhood walkability; and (c) the historical development of the community, which have all been suggested to be contextual determinants of community social capital. These factors have often been analyzed separately in empirical studies, but theoretically, they can also be characterized as a series of hypotheses. For example, older neighborhoods located in the center of a city are

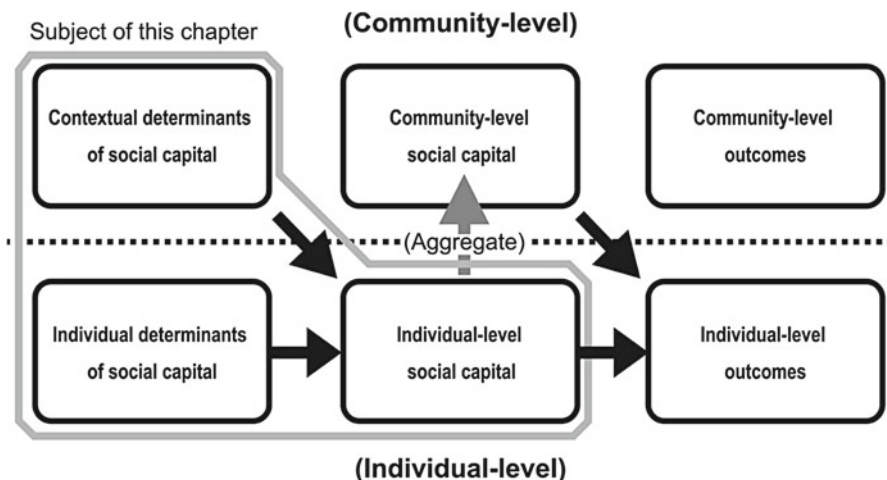


Fig. 5.1 Conceptual framework of the determinants of community social capital

supposed to be more walkable than newly developed suburban residential areas. This is because the built environments of traditional urban centers were designed with pedestrian movements in mind, while new suburban residential areas have been developed based on the premise that residents use automobiles to go everywhere. Therefore, researchers have hypothesized that people residing in urban centers would tend to walk more in their daily lives and have more opportunities for informal social interactions with neighbors, resulting in more accumulation of social capital in traditional urban centers, compared to suburbs. Such hypothetical relationships also need to be critically assessed from a wider contextual perspective by accounting for the variations in social backgrounds and contextualizing the spatial formation of residential places and community developments.

5.2 Previous Studies on the Contextual Determinants

5.2.1 Urbanization and Suburbanization

Table 5.1 summarizes the recent empirical studies on contextual determinants of community social capital. The degree of urbanization is a basic geographical characteristic of an area and has been considered to be associated with the formation of social networks and cohesion. Generally speaking, urbanization has been regarded as influencing the attenuation of human relations. People can live without strong ties with family or friends if they reside in a city, where many goods and services can be easily received through the market. Thus, for people in urban places, community social capital (at least the bonding type) is not necessary for everyday life,

Table 5.1 Recent empirical studies on the contextual determinants of community social capital

Study	Design	Setting	Sample	Dependent variables	Key independent variables	Key findings
Williamson (2002)	Cross-sectional study (Social Capital Benchmark Survey)	USA	Not reported	Political engagement (participation in protest-type activity, petition signing, attending a partisan political meeting, belonging to a group engaged in local reform efforts, belonging to a political organization, interest in politics, and voting in national elections)	Central city residence, population density, transportation patterns, commuting time, and neighborhood age	Residents of neighborhoods built before 1950 are significantly more likely to belong to a political organization, belong to a local reform organization, attend a partisan political event, attend a march or demonstration, vote in a national election, or attend a public meeting
Lund (2002)	Cross-sectional study	Portland, Oregon, USA	106	Psychological Sense of Community Scale	Neighborhood layout (pedestrian-oriented traditional neighborhoods vs. automobile-oriented modern suburban neighborhoods) and subjective evaluations of their neighborhood pedestrian environment	Sense of community was higher in the traditional neighborhood and pedestrian environment factors significantly influenced sense of community

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Table 5.1 (continued)

Study	Design	Setting	Sample	Dependent variables	Key independent variables	Key findings
Lund (2003)	Cross-sectional study	Portland, Oregon, USA	Not reported (1,454 distributed and 34 % returned)	Pedestrian travel behavior (consisted of frequency of strolling trips and frequency of destination trips) and neighboring behavior (consisted of frequency of unplanned interactions with one's neighbors, local social ties, and supportive acts of neighboring)	Neighborhood variables (objective and subjective evaluations of the physical environment)	The findings provide some support for the hypothesis that neighboring behaviors are related to objective physical factors. The hypothesis that neighboring behaviors are related to subjective physical factors is also somewhat supported
Leyden (2003)	Cross-sectional study	Galway, Ireland	279	How well residents knew their neighbors, their political participation, their trust or faith in other people, and their social engagement	Perceived neighborhood walkability	Respondents living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged
du Toit, Cerin, Leslie, and Owen (2007)	Cross-sectional study (PLACE: Physical Activity in Localities and Community Environments)	Adelaide, SA, Australia	2,194	Sense of community scale, informal social control, social cohesion, and local social interaction	Walkability index (by dwelling density, street connectivity, and net retail area) at urban census collection districts	A weak positive relationship between the walkability index and sense of community was found. No associations were found between walkability and local social interaction, informal social control, or social cohesion

Brueckner and Largey (2008)	Cross-sectional study (Social Capital Benchmark Survey)	USA	14,823	How often the respondent socializes with neighbors, the number of people the respondent can confide in, the number of close friends, the frequency of socializing with friends in a public place, the frequency with which friends are invited to the respondent's home, cooperation with neighbors to get something fixed or improved, membership in a hobby-oriented club, the frequency of attendance at any club meetings over the previous 12 months, and the number of formal nonchurch groups to which the member belongs	Population density at census tract level	Social interaction tends to be weaker, not stronger, in high-density census tracts
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Study	Design	Setting	Sample	Dependent variables	Key independent variables	Key findings
Cohen, Inagami, and Finch (2008)	Cross-sectional study (L.A.FANS: Los Angeles Family and Neighborhood Survey)	Los Angeles County, California, USA	2,431	Collective efficacy [social cohesion (five items) and informal social control in a neighborhood (three items)]	Characteristics of the built environment (presence of parks, alcohol outlets, elementary schools, and fast food outlets)	Parks were independently and positively associated with collective efficacy; alcohol outlets were negatively associated with collective efficacy only when tract-level disadvantage was not included in the model. Fast food outlets and elementary schools were not linearly related to collective efficacy
Wood et al. (2008)	Cross-sectional study	Metropolitan Perth, WA, Australia	335	Social capital scale (comprised of factors measuring trust, concern, reciprocity, civic engagement, friendliness, and networks), participation scale (measured participation in 13 community activities), and safety scale (comprised of five items measuring feelings of safety in various situations)	Street pattern and “upkeep” at suburb level, the number of destinations within an 800 m buffer, the network distance to the nearest destinations (school, bus stop, shop, park, and postbox), and perceived adequacy of facilities	Social capital had a negative relationship with the number of local destinations, but a positive association with perceived adequacy of facilities and proximity to shops. A high level of neighborhood upkeep was associated with both higher social capital and feelings of safety

<p>Wood, Frank, and Giles-Corti (2010)</p>	<p>Cross-sectional study (part of the SMARTRAQ: Strategies for Metropolitan Atlanta's Regional Transportation and Air Quality)</p>	<p>Atlanta, Georgia, USA</p>	<p>609</p>	<p>Sense of community scale</p>	<p>Objective measures of built environment (land use mix, connectivity, commercial floor area ratio, net residential density) within a 1 km road network-based buffer around each participant's household. Perceptions of built environment (perceptions about access to walkable shops and services, seeing neighbors when walking, safety from traffic and crime when walking, as well as the presence of interesting sites, good sidewalks, safe street crossings, adequate street lighting, and steep hills)</p>	<p>Sense of community was associated with living in neighborhoods with lower levels of land use mix, but with higher levels of commercial floor area ratio</p>
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Study	Design	Setting	Sample	Dependent variables	Key independent variables	Key findings
Nguyen (2010)	Cross-sectional study (Social Capital Benchmark Survey)	USA	22,191	Social trust, diversity of friendship, the number of group involvements, informal social interaction, organized group interaction, faith-based social capital, giving and volunteering, non-electoral participation, and electoral politics	Sprawl index (composed of residential density and street accessibility) at county level	Compact living at the county level was found to be unfavorable to social interaction, faith-based social capital, and giving and volunteering, while it is positively related to political participation such as voting, involvement in political groups and local reforms, and interest in national affairs
Hanibuchi, Nakaya, Hanaoka, and Muranaka (2012)	Cross-sectional study (JGSS: Japanese General Social Surveys)	Japan	12,299	General trust, attachment to place, horizontal organization, and vertical organization	Urbanization and suburbanization (MUEA) at municipality level	The respondents who resided in rural municipalities were more likely to belong to both vertical and horizontal organizations. No differences were seen between urban centers and suburbs within these metropolitan areas studied

<p>Hanibuchi, Kondo et al. (2012)</p>	<p>Cross-sectional study (AGES: Aichi Gerontological Evaluation Study)</p>	<p>Chita region, Aichi Prefecture, Japan</p>	<p>11,876</p>	<p>General trust, norms of reciprocity, attachment to place, horizontal organization, vertical organization, meeting friends</p>	<p>Walkability, community age, and urbanization at network buffer ($r = 500$ m)</p>	<p>Respondents who lived in older neighborhoods tended to report higher social capital than those who lived in newly developed neighborhoods. Significant associations were also observed between urbanization and social capital indicators (though the direction of associations was mixed), while walkability was generally not associated</p>
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compared to those who reside in traditional rural communities. In addition, increased anonymity and diverse social differences among residents, resulting from large immigrations into cities, particularly during the modern age, have made it difficult to have a shared social norm. Thus, researchers often insist that urbanization erodes the social capital. For example, Rosero-Bixby (2006) examined the levels of social capital in eight countries in Latin America and found that the social capital (community participation and trust in neighbors) clearly declines with urbanization.

More importantly, suburbanization and urban sprawl, rather than urbanization itself, have been examined in relation to the erosion of community social capital. In *Bowling Alone*, Putnam (2000) blamed urban sprawl for the decline of social capital in the USA during the last 30 years. He stated that “it is difficult to overstate the symbiosis between the automobile and the suburb” (p. 212) and went on to say that “the car and the commute, however, are demonstrably bad for community life. In round numbers the evidence suggests that *each additional 10 min in daily commuting time cuts involvement in community affairs by 10 %*—fewer public meetings attended, fewer committees chaired, fewer petitions signed, fewer church services attended, less volunteering, and so on” (p. 213; emphasis in original). Moreover, he pointed out that “strikingly, increased commuting time among the residents of a community lowers average levels of civic involvement even among noncommuters” (p. 213), indicating a contextual effect of the suburban community on social capital.

In recent empirical studies, however, more complex and contradictory findings have also been reported. For example, Nguyen (2010) found that urban sprawl may support some types of social capital, while negatively affecting others. Compact living at the county level (high population density and street accessibility) was found to be unfavorable for social interaction, faith-based social capital, and giving and volunteering. Nevertheless, it is positively related to political participation, for example, voting, involvement in political groups and local reforms, and interest in national affairs. Brueckner and Largey (2008) tested whether or not low-density living reduces social capital, using an instrumental-variable approach. They found a negative link between social interaction and population density, and therefore, social interaction tends to be weaker, not stronger, in high-density census tracts.

In countries in the non-Western context, Hanibuchi, Nakaya, Hanaoka, and Muranaka (2012) examined the association between urbanization/suburbanization and social capital in a region of Japan. Hanibuchi, Nakaya, et al. (2012) reported that the respondents who lived in rural areas were more likely to belong to both vertical and horizontal organizations, compared to those in the centers of large cities. Significant differences were seen between urban and rural areas for belonging to organizations, while no clear differences were seen between urban centers and suburbs. Although suburbs receive much attention as places of social capital erosion, as typified by Putnam’s criticism toward sprawl, supporting evidence was not found in Japan. Thus, the association between urbanization/suburbanization and social capital appear to vary according to the study area, sample population, and other variables used in the model, suggesting that further study is warranted.

5.2.2 *Walkability*

Although closely related to suburbanization and sprawl, the concept of walkability, as a more specific aspect of the neighborhood built environment, has recently received a lot of attention. Walkability is a new concept for urban design that refers to how much the area can be considered pedestrian friendly. Walkability is mainly evaluated and measured by neighborhood characteristics, such as residential density, street connectivity, land use mix, or access to local destinations, and more specific environment characteristics, such as the presence of sidewalks, green spaces, and streetlights. In public health, researchers have examined whether or not living in a walkable neighborhood increases the levels of physical activity, mainly through walking (Brownson, Hoehner, Day, Forsyth, & Sallis, 2009).

Studies in urban planning and public health have begun to use the concept of walkability to examine the neighborhood determinants of social capital (or closely related concepts, such as collective efficacy or sense of community) (Frumkin, Frank, & Jackson, 2004; Wood & Giles-Corti, 2008). Such works are largely informed by claims made by New Urbanism that walkable neighborhoods enhance community social capital by increasing opportunities for informal social interaction among residents (Lund, 2002, 2003).

So far, some positive associations have been reported, while other studies find limited support or mixed results for the association between walkability and social capital. For example, from a survey in Galway, Ireland, Leyden (2003) reported that respondents who were living in walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and be socially engaged, compared to those who were living in the car-oriented suburbs. Cohen et al. (2008) found that the number of parks was positively associated with collective efficacy. Other studies have also supported the premise that pedestrian-friendly environments are related to increased social capital (Lund, 2002, 2003; Podobnik, 2002; Rogers, Halstead, Gardner, & Carlson, 2011).

Nevertheless, other authors have found limited support or mixed results for the association between walkability and social capital. Based on data from an Australian sample and objective measures of walkability, du Toit et al. (2007) could not conclude that walkable neighborhoods were necessarily sociable. They found a weak positive relationship between their walkability index and the sense of community but found no association between walkability and local social interaction, informal social control, and social cohesion. Wood et al. (2008) also reported complex results from Perth, Western Australia. They found that social capital had a negative relationship with the number of local destinations, but a positive association with the perceived adequacy of facilities and proximity to shops. Similarly, Wood et al. (2010) reported that a sense of community was associated with living in neighborhoods with lower levels of land use mix, but with higher levels of commercial floor area ratios.

In a Japanese case study, Hanibuchi, Kondo, et al. (2012) measured the objective walkability score using a geographical information system (GIS) approach and

analyzed its association to social capital. No significant positive association was found between the walkability score and any of the social capital indices, indicating that walkable does not mean sociable, at least for the population of older Japanese adults.

5.2.3 *Historical Development*

Among the possible contextual determinants of social capital, the historical dimension of the community has received less attention, despite its theoretical importance. The historical origins and the development process of the community appear to influence the quantity and quality of social interactions among residents. The Roseto story is a notable case study that reveals the importance of history when considering the determinants of community social capital. Nevertheless, such historical dimensions are difficult to understand quantitatively, even when considering basic information on community history, such as the time when the community (residential area) was initially developed.

In US and Australian studies, older or more traditional neighborhoods are often regarded as being more walkable, with their interconnected street networks, streets with sidewalks, and mixed land use, in contrast to newly developed and automobile-dependent suburbs (Frumkin et al., 2004; Smith et al., 2008). In other words, the dimensions of walkability and history were not clearly distinguished in previous studies. Traditional neighborhoods may also indicate the presence of long-standing organizations that encourage cohesive networks among residents and indicate the shared norms of reciprocity based on the historical background in the area. For example, in a community that had once experienced a disaster, volunteer disaster prevention groups may be organized more readily and norms of mutual help may be stronger, due to past experience. Thus, the effects of walkability on the community social capital need to be carefully teased from the historical context.

Except for Williamson (2002), who reported that residents of neighborhoods built before 1950 (housing age) were more likely to attend public meetings (a measure of social capital), no other studies have quantitatively addressed this issue, probably because of the difficulties in quantifying historical aspects of neighborhoods, such as their period of development. Consequently, most of the previous studies on the contextual determinants of social capital overlook the historical development of communities. Some earlier studies (not on the determinants of social capital) also used housing age as a proxy for neighborhood age (Berrigan & Troiano, 2002; Boer, Zheng, Overton, Ridgeway, & Cohen, 2007; Smith et al., 2008), but this indicator is limited as it cannot be a direct measurement of the age of the “community” or “neighborhood.” Thus, determining the time when a neighborhood was developed can be an important methodological challenge.

Hanibuchi, Kondo, et al. (2012) analyzed the association between community age and social capital, using old topographic maps of Japan in a GIS environment. They found that the respondents who lived in the oldest neighborhoods tended to

report higher social capital than those who lived in newly developed neighborhoods. Four of six indicators of social capital (general trust, attachment to place, vertical organization, and meeting friends) were significantly associated with the date of settlement, indicating that the historical “age” of the community was a stronger predictor of social capital among residents. In particular, the likelihood of belonging to a vertical organization was quite high in the oldest neighborhoods.

Nonetheless, Hanibuchi, Murata, et al. (2012) noted that a specific residential area in Japan came to have “exceptionally” high levels of social capital, even though the area had been developed relatively recently. They reported that the area’s social capital was rooted in the sense of solidarity fostered by the fact that many residents worked for the same company. Geographical determinants are not necessarily systematic, since each place has its own unique history, as in the case of the Roseto story. This suggests the importance of exploring place-specific origins of social capital as well as systematic historical determinants, to explain why some communities are richer in social capital than others.

5.3 Some Challenges for Further Study

5.3.1 *Geographical Contexts*

Although the number of studies on the contextual determinants of social capital is increasing, they are still sparse and inconclusive about the possible effects that contextual factors can have on community social capital. One of the biggest challenges in this regard is in filling the geographical gaps between countries. To date, most studies have used data from a few Western societies, primarily the USA and Australia. Nevertheless, the geographical determinants of social capital may not be the same in different countries where the social contexts are different.

The findings of the Japanese case studies (Hanibuchi, Kondo, et al., 2012; Hanibuchi, Nakaya, et al., 2012) were not in-line with the hypotheses that had been originally proposed in the context of Western societies; namely, traditional urban centers are more walkable, and walkable built environments can contribute to the formation of more sociable neighborhood communities. On the other hand, traditional neighborhoods in Japan tended to have a higher social capital than that of the newer communities. What can we learn from these findings?

First of all, the premise that older urban centers are more walkable than newly developed suburban residential areas needs to be reconsidered. No significant differences were seen between the social capital of city centers and suburbs in the Japanese study. As a possible explanation, the suburbs in Japan may generally be more walkable and more mixed in terms of residents and land use and therefore less likely to be car dependent, compared to suburbs in the USA and Australia, leading to the apparent lack of difference between levels of social capital in city centers and suburbs. According to Hanibuchi, Nakaya, et al. (2012), “urban vs. rural” may be more important than “center vs. suburbs” in the Japanese geographical context.

In addition, the relation of community age to walkability requires further discussion. According to Hanibuchi, Kondo, et al. (2012), the proportion of the oldest neighborhoods showed a weak *negative* correlation with the walkability score, indicating that the oldest neighborhoods were not pedestrian friendly, at least in the study area. This may be due to the fact that many of the traditional neighborhoods in Japan had been developed many years ago. Older cities and towns in Japan tend to be less walkable environments, i.e., narrow streets, absence of sidewalks, poor visibility, low-rise buildings (= less populated), and fewer open spaces, which suggests a setting that is distinctly different from that of the USA and Australia (the “New World”), where most of the earlier studies were conducted.

In any case, community age has been associated with social capital. Thus, the length of history of a community appears to influence the social capital, but the association is not mediated by walkability. Put simply, traditional does not mean walkable and walkable does not mean sociable, but traditional does mean sociable. Again, the presence of long-standing traditional neighborhood associations, or the norms of reciprocity, based on the historical background in the community may provide the answer. Overall, community age needs to be distinguished from walkability in studies that explore the contextual determinants of social capital.

To summarize, future studies will need to carefully consider the geographical context and the generalizability of evidence from a given place. The characteristics of place, as represented by words such as “suburban” or “traditional,” may have different features of the built and social environments due to their geographical contexts of country/region.

5.3.2 *Geographic Scales*

The way in which a geographical area of reference is defined in a questionnaire on social trust or social participation, for example, could affect the responses. Most of the indices used by Hanibuchi, Nakaya, et al. (2012), Hanibuchi, Kondo, et al. (2012) were not specific to the local/neighborhood environments of the respondents. The measurement of neighborhood trust, referring to trust in/among neighborhoods, was not used, but instead, the measurement of general trust was used. When survey questions are specific to the respondents’ neighborhood, more sensitivity may be possible when analyzing the association to the geographical determinants. Future research studies will need to use specific survey questions to examine the geographical distribution of community social capital in different geographical areas.

Studies of community social capital must also choose appropriate geographical areas for the analyses. Although this chapter has focused on a relatively small area of analysis (i.e., neighborhood), studies that explore the contextual determinants of social capital often range from local to global areas (e.g., Park and Subramanian (2012), dealing with the country-level determinants of trust). Many different geographical scales have been used for the analytical grouping units (i.e., “level 2” in multilevel analysis) based on data availability, though explanations are not always provided.

While some authors are aware of the ecological fallacy, they remain unaware of the MAUP (modifiable areal unit problem) (Openshaw, 1984), where different sets of areal units for data aggregation lead to different analytical results based on the areal units.

Neighborhood has been used as a remarkable geographical area of reference in recent studies. For example, Nakaya (2011) examined the frequency of keywords used in articles in *Health & Place* and found that “neighborhood” was most frequently used (it was situated at the center of a keyword cloud). Nevertheless, the term “neighborhood” can be ambiguous. Even in a single country (e.g., Japan), some studies of social capital have used various geographical areas in the analysis. No clear definition of “neighborhood” has been established, and the ambiguity is still problematic. Although the GIS approach seems to improve on the arbitrarily defined administrative units, with its proposed buffer zones around each respondent, recent studies have reported that the actual spatial behaviors of residents are not consistent with their buffer zones (e.g., Zenk et al., 2011). Geographical scales, or areas of reference, will continue to be crucial aspects in the study of social capital.

5.4 Policy Implications

One of the reasons for exploring the determinants of social capital is to seek out possible interventions. With clear evidence that neighborhood walkability increases the community social capital and that social capital improves the health of residents, policy implications for health promotion can be derived for interventions in the built environments. Nevertheless, the case study of Japan showed that community social capital can be determined from the history of community and from other individual or geographical determinants. Does this imply that we cannot change social capital, just as we cannot change history?

From the case study, we need to be aware of the importance of policy aimed at maintaining (not increasing) social capital. Usually, eroding social capital is thought to be easier than increasing it. Since community age seems to influence community social capital, policies to maintain social capital would be useful in preventing its erosion. For such policies, the first step would be to evaluate and understand the existing community social capital, so that researchers, policy makers, and residents could monitor its change within the community.

When the Great Hanshin-Awaji Earthquake happened in 1995, many disaster victims were forced to move into temporary housing. The housing assignments were sorted by age and household composition, without considering existing communities. The process has been considered as a cause of the erosion of neighborly ties and interactions in the temporary housing. The “solitary deaths” of earthquake victims resettled into temporary housing became a big social issue and was attributed by some to the breakup of social capital that existed in communities prior to the disaster. As a result of these lessons, following the Niigata Chuetsu Earthquake of 2004, the temporary housing was designed with a consideration of the previous community. The approaches have contributed to an improved maintenance of the community social capital (Ishida, 2008).

As indicated by Hanibuchi, Murata, et al. (2012), we need to consider the place-specific contextual determinants of social capital (e.g., immigrants with a common sociohistorical background), as well as the systematic part (e.g., community age). Policy makers need to understand the historical background of a specific region to appropriately evaluate the level of community social capital and consider policies that are aimed at maintaining the existing social capital.

5.5 Conclusion

In this chapter, we have devoted special attention to the contextual determinants of community social capital and looked at previous studies (mostly in the USA, Australia, and Japan) focusing on urbanization/suburbanization, walkability, and history of the community. As discussed in Sect. 5.2, the study of contextual determinants of social capital remains sparse, and the contexts that might determine levels of community social capital are not well understood. Other contextual factors, such as ethnic diversity (Letki, 2008, McCulloch, 2003, Stolle, Soroka, & Johnston, 2008), may also be important determinants of local social capital (see Chap. 12 by Gilbert and Dean). Studies in Japan have revealed different conclusions for the hypotheses based on the geographical settings of Western societies. Since contextual determinants depend on the context of a given study area, further studies in different countries and regions would be useful for understanding the effect of different sociohistorical contexts.

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