

# Is there a place for social capital in the psychology of health and place?

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## Abstract

The field of environmental psychology is primely placed to further understanding of the way in which social capital influences or is influenced by the context and characteristics of neighbourhood environments, but has been one of the quieter voices in the cacophony of social capital discourse over the last decade. While there is increasing research interest in area and neighbourhood variations in social capital, the mechanisms and causal pathways through which physical environments, social capital and health may be related are not yet clear. More refined unpacking of the relationship between social capital and neighbourhood design, features and settings is required to identify practical intervention points for preserving, fostering and harnessing social capital within communities. Through a review of literature, this paper explores whether there is a place for social capital in the psychology of place and considers the contribution that environmental psychology and related disciplines could make to future social capital research and applications.

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## 1. Introduction

Social capital has been a topical and diversely applied concept in many journals and disciplines over the last decade, engaging fields as disparate as sociology, health, political sciences, agriculture, economics and education. While academics and researchers continue to debate how to best define and measure social capital, the term is being increasingly branded onto a wide range of policy, social, public health and community agendas and initiatives. It has been harnessed by the rhetoric of governments of various political persuasions and used by both corporate and not-for-profit organisations. Most of these are well intentioned, and reflect a community desire to do something about the erosion of the ‘glue’ that holds society together.

A recent review by the Australian Productivity Commission for example, recommended that governments sustain functions and roles that support social capital, while modifying policies that erode it and harnessing existing social capital to deliver programs more effectively (Productivity Commission, 2003). National surveys of

social capital are being instigated in an increasing number of countries, including Canada (Schellenberg, 2004), UK (National Statistics, 2002), USA (Saguaro Seminar: Civic Engagement in America, 2000) and Australia (ABS, 2000) on the premise that social capital is a marker of individual and community wellbeing. Social capital has also given rise and form to corporate and not for profit sector initiatives ranging from grass roots community building (Wallis, Crocker, & Schechter, 1998) to urban renewal of disadvantaged areas (Forrest & Kearns, 1999) to preservation of natural environments (Pretty & Ward, 2001).

Despite the expanding myriad of studies contrasting regional, area and neighbourhood differences in social capital, there has been far less progress in disaggregating the specific mechanisms through which social capital and physical environments might relate. Given this, and that much of the academic social capital discourse encompasses the interplay between human interactions and community contexts, it is perhaps surprising that there are limited explicit references to social capital in the environmental psychology literature. For example, social capital very rarely appears as a key word in articles published in the Journal of Environmental Psychology to date. This paper thus explores whether there is a home for social capital among concepts pertinent to the interface between people

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and place, particularly in relation to health, and considers the contribution that environmental psychology and related disciplines could make to social capital discourse in this regard.

## 2. Origins, definitions and types of social capital

There is no crystallised moment in which the concept of social capital was born, and a consensual definition remains somewhat elusive. As an explicit term, its origins have been traced back as far as the 1920s (Hanifan, 1920), and its application to urban life in the 1960s (Jacobs, 1961). Hanifan described social capital as ‘those intangible assets that count for most in the daily lives of people: namely good will, fellowship, sympathy, and social intercourse among the individuals and families who make up a social unit’ (Hanifan, 1920, p. 78).

As an idea and way of thinking, even earlier origins have been mapped, including 19th century sociological discourse (Portes, 1998) and the evolution of Marxist economic theory. Yet earlier still:

Since the dawn of time, the survival of human beings has depended on the level of their integration into one or more mutually helpful communities. Those with social support and links with others live better than those who remain isolated (Satorius, 2003, p. S105)

Most current definitions of social capital reflect one of three ‘schools of thought’ that evolved from the sociological and political sciences and are personified by Pierre Bourdieu (Bourdieu, 1986), James Coleman (Coleman, 1988) and Robert Putnam (Putnam, 1995). Detailed analysis of the evolution, commonalities and differences among the Bourdieu, Coleman and Putnam perspectives abound (Harriss & De Renzio, 1997; Moore, Shiell, Hawe, & Haines, 2005; Portes, 2000; Winter, 2000; Woolcock, 1998) and are not duplicated in this paper.

At the simpler end of the definitional spectrum, social capital is often characterised as the glue that holds society together (Altschuler, Somkin, & Adler, 2004; Potapchuk, Crocker, & Schechter, 1997). More explicit definitions reflect many variations on a theme, with networks, norms and trust, and some notion of mutual goals, actions or benefits appearing to be core ingredients. Social capital is not necessarily defined by, or confined to, geographically bordered communities and has been studied in ‘communities’ as diverse as schools (Strike, 2004), workplaces (Cohen & Prusak, 2001) and chatrooms (Drentea & Moren-Cross, 2005). For the purpose of this paper, Cohen and Prusak’s definition represents a reasonable synthesis of theoretical and definitional perspectives, i.e.:

Social capital consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviours that bind the members of human networks and communities and make cooperative action possible (Cohen & Prusak, 2001, p. 4).

## 3. Something old or something new?

There is a multiplicity of concepts purporting to measure community social dynamics, but few empirical or theoretical accounts of how these variables differ or relate (Parker et al., 2001). In addition, little work has been done to distinguish social capital from this array of potentially related notions (Lochner, Kawachi, & Kennedy, 1999; Pooley, Cohen, & Pike, 2005). To this end, some query whether social capital is simply a repackaging or rebadging of old concepts (Edwards & Foley, 1997; Rose, 2000), while others maintain that it offers something unique, or at the least, a new perspective (Borthwick, 1999; Carlson & Chamberlain, 2003).

Undeniably, social capital encompasses social processes (such as support and trust) that have long been of interest to both researchers and general humanity. However, it is distinguishable from concepts such as social support that primarily represent an individual level perception and experience (Kawachi, Kim, Coutts, & Subramanian, 2004; McKenzie, Whitley, & Weich, 2002) and is intended to capture something over and above the measurement of individual social connections (Kawachi & Kennedy, 1997). As articulated by Shiell and Hawe (1996), when concerned with social systems such as communities, the whole is not, and differs from, the sum of the individual parts. From an ecological perspective, one of social capital’s inherent conceptual values is the fact that it draws attention to the meso-level social structures of families, workplaces and neighbourhoods, which are sometimes lost between individual and broader social systems orientations (Edwards & Foley, 1997).

Social capital also seeks to capture something ‘over and above’ the attitudes, sentiments and perceptions inherent in concepts such as sense of community, with measures of social capital increasingly including behavioural outworkings of key components such as reciprocity (e.g., number and type of favour exchanges with neighbours) or civic engagement (e.g., participation in voluntary work) over a given time period. ‘Networks’ in a social capital sense of the word can extend beyond relations and affinities at the individual level (often referred to as bonding social capital) (Harpham, Grant, & Thomas, 2002) to include networks of trust and relationships between people or organisations across power or authority gradients (bridging social capital) (Szreter & Woolcock, 2004).

Somewhat paradoxically, the benefits of social capital that exist at a collective community or group level can accrue also to individuals (Walkup, 2003). As illustrated by Kawachi, Kennedy, Lochner, and Prothrowstith (1997), a socially reclusive widow may benefit from the caring and watchful eye of residents in the neighbourhood in which she resides. Less hypothetically, the risk of mortality as a consequence of a major Chicago heat-wave was found to correspond strongly to markers of social capital at both the individual and community level (Semenza et al., 1996). The highest risk of death was concentrated among socially

isolated elderly persons, and was 30% lower among those who had links to community groups such as clubs and churches (Semenza et al., 1996). At a community level, the risk of dying among the socially isolated elderly was higher in communities characterized by low levels of interaction in public places and higher crime rates (Cannuscio, Block, & Kawachi, 2003).

While social capital resonates with aspects of concepts such as place attachment, place identity and sense of place, it is not 'place-bound'. Nonetheless, the neighbourhood or community is a context in which social capital can be fostered, accessed or destroyed and in which norms and behavioural manifestations of trust, reciprocity, civic engagement and mutual support can reside. It is also possible that social capital provides an alternative explanation for some of the community outcomes attributed previously to other concepts. In a recent paper by Lewicka for instance, social capital emerged as an important mediator in the relationship between place attachment and civic activity that has been previously reported (Lewicka, 2005).

#### 4. Social capital and health

Within the health literature, social capital has been examined as both an outcome and independent variable and has been linked to general health outcomes such as mortality (Lochner, Kawachi, Brennan, & Buka, 2003; Veenstra, 2002); self-rated health (Kawachi & Kennedy, 1999; Pollack & Von Dem Knesebeck, 2004); and more recently, to a diversity of specific health outcomes and behaviours, including sexually transmitted disease (Holtgrave & Crosby, 2003), smoking (Bolin, Lindgren, Lindström, & Nystedt, 2003), and teenage pregnancy (Moffitt, 2002). Social capital also converges with a number of concepts understood to shape positive mental health, including connectedness, trust and bonding (Zubrick, Williams, Silburn, & Vimpani, 2000); social support (Felton & Shinn, 1992); and social isolation (Kawachi & Berkman, 2001). The potential nexus between social capital and mental health has been corroborated by a number of recent papers (Almedom, 2005; Henderson & Whiteford, 2003; McKenzie et al., 2002; Whitley & Prince, 2005).

Although causal pathways between social capital and specific health outcomes are unlikely to be direct (McKenzie et al., 2002) and there is some equivocal in findings, the weight of evidence from social capital studies to date suggests that it is 'likely to be a significant determinant of at least some important health outcomes' (Szreter & Woolcock, 2004, p. 653).

Where we live, and how this relates to health, has engendered considerable research and policy interest in recent years (Diez Roux, 2001; Macintyre, Ellaway, & Cummins, 2002; Pickett & Pearl, 2001). This has encompassed various studies of area, place or neighbourhood effects on generalised health (Kadushin, 2004); health

related behaviours (De Bourdeaudhuij, Sallis, & Saelens, 2003; Stead, Macaskill, Mackintosh, & Reece, 2001) and specific health outcomes (Matteson, Burr, & Marshall, 1998). At the same time, there has been growing interest in neighbourhood and area variations in social capital (Altschuler et al., 2004; Kawachi & Kennedy, 1999; Leyden, 2003; McCulloch, 2001; Subramanian, Lochner, & Kawachi, 2003; Veenstra, 2005). However, research exploring the specific aspects of environments that might influence social capital comprises only a small and fragmented portion of the burgeoning body of social capital literature.

#### 5. Social capital and the environments in which people live

As with area variations in health, disentangling the influence of individual versus contextual factors on social capital is complex (Macintyre & Ellaway, 2000; McKenzie et al., 2002) and there is a need to assess the extent to which spatial differences in social capital can be truly attributed to collective experiences at the neighbourhood level, rather than to the confounding influence of resident characteristics (Subramanian et al., 2003) and issues of self selection (Halpern, 1995).

Although sometimes equivocal, a growing body of research suggests that aspects of a community's environment and settings may shape social capital in a way that is not explained by individual or demographic variables. For instance, neighbourhood differences in social capital have remained after adjusting for individual factors such as age, sex, marital status, race and socio-economic factors such as income and education (Hyypä & Mäki, 2003; McCulloch, 2003; Subramanian et al., 2003).

Empirical studies of the specific physical attributes of neighbourhoods that might relate to social capital began to emerge in the literature in the late 1990s (Macintyre & Ellaway, 1998, 1999; Saegert & Winkel, 1998) but were followed by a relative hiatus in uptake or publication by other researchers. With the exception of a few recent studies (Leyden, 2003; Lund, 2003), the focus in the literature is still primarily on geographic comparisons of social capital and there is only limited elucidation of the specific pathways through which aspects of the physical environment and social capital may be related. This void contrasts with the depths of research in psychology related fields that have sought to unpack the mechanisms of associations between environments and concepts such as sense of community (Chavis & Wandersman, 1990; Plas & Lewis, 1996) and place attachment (Lewicka, 2005).

Existing research on the potential relationship between social capital and physical environments can be categorised broadly into three domains: studies of the relationship between social capital and macro environmental trends (such as crime, stability); meso-level exploration of the relationship between social capital and aspects of neighbourhood context or design; and more micro-level investigation of the nexus between social capital and specific

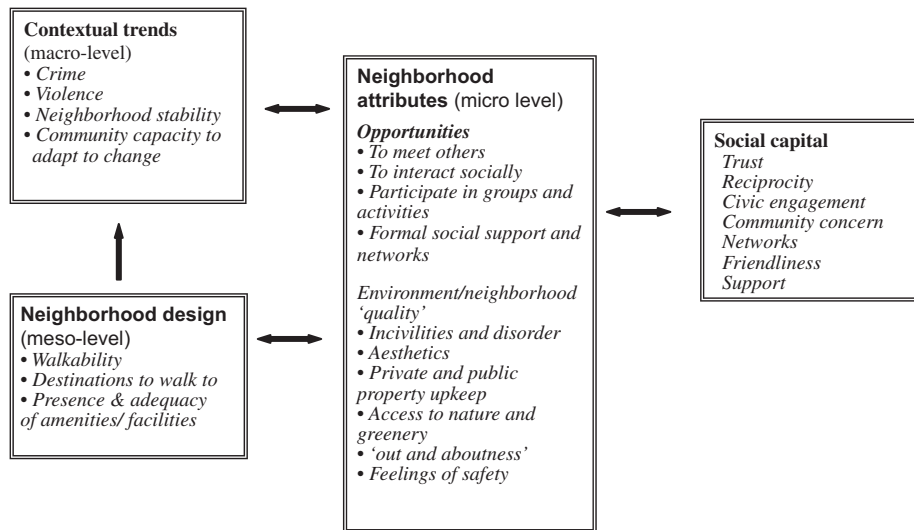


Fig. 1.

neighborhood attributes and features. These domains are depicted in Fig. 1 and expounded upon below.

### 5.1. Social capital and macro-level environmental trends

The potential relationship with macro-level community phenomenon such as crime and violence was one of the early areas of empirical social capital research. While not without methodological shortcomings (particularly related to the use of limited items and secondary data), the findings of such studies are generally consistent and in a direction that confers social capital as a positive social and environmental influence. Kawachi and colleagues for example, found higher levels of social capital to be negatively related to the incidence of crime, including violent crime (Kawachi & Kennedy, 1999; Kennedy, Kawachi, & Brainerd, 1998) and burglary (Kawachi & Kennedy, 1999). In a recently published Australian study, perceptions of safety were positively associated with strong trust in neighbors (Ziersch et al., 2005).

Other studies considering the links between environments and crime do not refer specifically to social capital, but have examined similar concepts. Sampson et al. (1997) for example, found that social cohesion and collective community norms was positively associated with lower levels of neighborhood violence. Moreover, improving the physical environment and safety of disadvantaged housing developments has resulted in social capital by-products such as trust and neighbourly interactions (Halpern, 1995).

Neighbourhood stability is another feature of the macro-environment that has been considered fleetingly in social capital research. Preliminary investigation suggests that neighbourhoods with higher levels of social capital may respond and adapt to change better than those with lower levels (Lang & Hornburg, 1998). Greater stability in times of change is in turn seen to have a positive effect on levels of social cohesion (Sampson, 1991). By contrast, residential

instability can sever existing social ties and disrupt the prevailing system of social networks (McCulloch, 2003). Such effects may be more pronounced for some subgroups within a neighborhood, with women for example, more likely to feel the impact of residential turnover on the ability develop informal ties and local friendship networks (McCulloch, 2003).

### 5.2. Social capital and neighborhood context and design

The relationship between neighbourhood design and social capital is an emerging avenue of research (see Table 1). New Urbanism posits that the way in which street patterns divide and connect suburban space influences people's movements and interactions within neighbourhoods (Southworth & Owens, 1993). Hence, neighbourhood walkability is one of the hypothesised mechanisms through which design factors influence social capital. A more walkable environment and street network design has been found to promote neighbourly interactions and the development of social capital (Leyden, 2003). Similarly, the frequency of walking trips within neighbourhoods appears to be positively associated with unplanned interactions with neighbours (Lund, 2002) and sense of community (Lund, 2003).

Drawing from the fear of crime literature, the adequacy of lighting and perceptions of safety also have implications for walkability, neighbourhood interactions and trust (Painter, 1996; Keane, 1998). Moreover, the more people 'out walking', the safer the neighbourhood is for those who walk. Physical design elements such as footpaths and proximate local shops can also promote walkability (Pikora, Giles-Corti, Knuiman, Bull, & Jamrozik, 2006) and facilitate the social interactions and relations that foster social capital locally (Leyden, 2003; Lund, 2003; Macintyre & Ellaway, 1999). Conversely, a higher presence and level of vehicular traffic and car parking has been

Table 1  
Empirical studies of the relationship between social capital and the built environment

Study	Research design and sample	Independent variables	Dependent variables	Key findings
Araya et al. (2006)	<i>Design</i> Self-administered questionnaire	Individual perceptions of trust, social participation, social cohesion, social control and the built environment	Mental health as measured by the General Health Questionnaire-12 (GHQ-12)	Trust and social cohesion were significant associated with GHQ-12 scores One-third of the variance for neighbourhood quality and 10% for social control was explained at neighbourhood level after adjusting for individual variables
Leyden (2003)	<i>Design</i> Cross-sectional survey <i>Setting</i> Eight neighbourhoods in Galway, Ireland	Neighbourhood design and walkability	Social capital: <ul style="list-style-type: none"> <li>● How well residents knew neighbours</li> <li>● Political participation</li> <li>● Trust and faith in other people</li> <li>● Social engagement</li> </ul>	Residents living in mixed-use walkable neighbourhoods had better social capital—more likely to know their neighbours, participate politically, trust others and become socially involved
Lund (2003)	<i>Design</i> Qualitative and quantitative survey <i>Setting</i> Eight neighbourhoods of varying design in the Portland, USA	<i>Personal variables</i> Socioeconomic and attitudinal items <i>Behavioural variables</i> Walking frequency <i>Neighbourhood variables</i> Objective and subjective measures of physical environment	Pedestrian travel behaviour Neighbouring behaviour <ul style="list-style-type: none"> <li>● Chance encounters</li> <li>● Local social ties</li> <li>● Supportive neighbourhood acts</li> </ul>	The study found an association between: <ul style="list-style-type: none"> <li>● Local access and pedestrian travel (the more shops and other amenities, the more walking)</li> <li>● Pedestrian travel and neighbourhood behaviour (people who walk more often most likely to have chance encounters, but not to participate in supportive acts)</li> <li>● Local access and neighbourhood behaviour (residents with more local access did more neighbouring behaviour)</li> </ul>
Lund (2002)	<i>Design</i> Cross-sectional household survey  <i>Setting</i> Two Neighbourhoods (one traditional, one modern-style) in Portland, USA	<i>Neighbourhood variables</i> Layout-pedestrian vs. vehicle oriented Perception of walking in neighbourhood <i>Behavioural variables</i> <ul style="list-style-type: none"> <li>● Destination trips</li> <li>● Strolling trips</li> </ul>	Sense of community (Psychological Sense of Community Scale)	Sense of community significantly higher in the traditional neighbourhood Pedestrian environment factors significantly influenced sense of community, controlling for various demographic Influences
McCulloch (2003)	<i>Design</i> Secondary analysis of national household survey data <i>Setting</i> Cross-section of British households	Neighbourhood social characteristics (including measure of affluence)	Social capital (eight items) Social organisation (five items) Severity of community problems and incivilities (eight items)	Social capital and social organisation were strongly related to each other, and to neighbourhood social characteristics Social capital significantly lower in disadvantaged, residentially unstable, and high population density neighbourhoods

Semenza et al. (2006)	<p><i>Design</i> Quasi-experimental study—pre- and post-intervention survey</p> <p><i>Setting</i> Three neighbourhoods within Portland, USA</p>	<p>Intervention involved community in designing and establishing community meeting places and art</p>	<p>Mental health (depression) Sense of community Social interaction Perceived neighbourhood control Neighbourhood participation Social capital</p>	<p>Significant increase in mean sense of community and social capital post community development intervention Mean scores on depression scale decreased significantly post intervention</p>
Wood et al. (2007)	<p><i>Design</i> Cross-sectional survey, GIS data on built environment, focus groups</p> <p><i>Setting</i> Three suburbs in Perth, Western Australia</p>	<p><i>Individual level</i> No. destinations &lt;800 m Distance to nearest school, bus stop, shop, park, post box Dwelling type Perceived adequacy of facilities</p> <p><i>Suburb level</i> Street network pattern Suburb upkeep</p>	<p>Social capital scale (with subscales relating to trust, reciprocity, community concern, civic engagement, social support, friendliness) Feelings of safety Participation in activities in suburb</p>	<p>After adjustment for demographic factors, the built environment was found to have a significant but small effect on social capital and feelings of safety, particularly in relation to the number and perceived adequacy of destinations. A high level of neighbourhood upkeep was associated with both higher social capital and feelings of safety</p>
Ziersch, Baum, MacDougall, and Putland (2005)	<p><i>Design</i> Cross-sectional survey and in-depth interviews</p> <p><i>Setting</i> Western suburbs, Adelaide, Australia</p>	<p>Perceptions of neighbourhood Pollution Trust Connections Reciprocity Safety Local civic actions</p>	<p>Self reported health as measured by SF-12 mental and physical health summary scores</p>	<p>Perceived neighbourhood safety associated with physical and mental health Neighbourhood connections and perceived safety associated with mental health Negative perceptions of neighbourhood pollution associated with civic activities</p>

shown to negatively affect perceptions of area friendliness, safety and helpfulness (Mullen, 2003). Our own research in three Western Australian urban neighbourhoods found that social capital was associated with the number and perceived adequacy of destinations and with the upkeep of the physical neighbourhood environment (Wood et al., 2007).

The design and mix of residences within neighbourhoods also has some relevance, as illustrated in Cannuscio et al. (2003)'s consideration of the way in which different models of housing for older people might influence access to social capital. Some individuals are more reliant on social capital accessed through the 'local community' (Chavis & Wandersman, 1990; Stewart-Weeks, 1997), by virtue of their current life-stage (for example, mothers at home with young babies); mobility (such as retired people with physical health restrictions) or resources (those who are unemployed or without a private source of transport).

### 5.3. *Social capital and specific neighbourhood features and attributes*

As exemplified in the literature relating to sense of community, sense of place and other community concepts, there are many specific attributes and features within the physical environments of neighbourhoods that can influence people related dynamics, interactions and sentiments. These include restorative access to nature (Korpela, 2003), housing design (Cattell, 2001; Saegert & Winkel, 1998), safety measures (Macintyre & Ellaway, 2000; Perkins & Taylor, 1996) and incivilities (Chavis & Wandersman, 1990; Sooman & Macintyre, 1995) to name just a few.

Similarly specific associations have rarely been hypothesised in published empirical social capital studies to date, but have emerged from several qualitative studies. In particular, neighbourhood factors such as local services, area history, opportunities for meeting others and for participation appear to play a role in developing trust, norms of cooperation and reciprocity, and patterns of mutual aid and information exchange (Boneham & Sixsmith, 2006; Cattell, 2001). Our own qualitative research confirms that people's involvement, trust and relationships with others and their community are influenced by neighbourhood design and aesthetics, perceptions of local safety, and opportunities to forge local support and social networks (Wood, 2006).

While it has been contended that community participation and civic engagement can both build and epitomise social capital (Putnam, 2000), research on opportunity structures highlights the need for relevant infrastructure and opportunities to be present in neighbourhoods for 'community involvement' (Baum & Palmer, 2002) and social interaction (Altschuler et al., 2004) to occur. Opportunities for informal or casual meeting and for participation in groups and associations are both conducive to social capital formation (Baum & Palmer, 2002; Cattell, 2001).

## 6. Future research directions

While it could be argued that concepts pertaining to the psycho-social dynamics of communities have reached saturation point, this paper posits that social capital merits greater inclusion in considerations of psychology and place. Despite a burgeoning literature, there are many theoretical, knowledge and intervention gaps to be filled in order to flesh out the exact nature, magnitude and pathways of the relationship between the design and attributes of physical environments and social capital.

In social capital research generally, direction and pathways of causality are often unclear (Lochner et al., 2003) because most of the evidence to date is cross-sectional. For example, higher mortality in a region could serve to erode social cohesion rather than the reverse (Kennedy et al., 1998) and bi-directional effects are plausible, whereby low levels of social capital within a community diminish trust, which in turn diminishes social interaction and civic engagement. The relationship between social capital and physical environments is also not necessarily unidirectional; civic engagement, for example, can contribute to support services or result in advocacy for improvements to the physical environment, while trust and reciprocity may have a bearing on the reputation an area develops, or vice versa. Moreover, people with certain social pre-dispositions conducive to creating social capital, may select certain types of neighbourhoods to live in. In the future, longitudinal studies are required to further explore these hypotheses.

The use of multilevel modelling techniques to disentangle the relative compositional and contextual effects of environments is gaining momentum in social capital research (Hyppä & Mäki, 2003; Lindstrom, Merlo, & Ostergren, 2003; Poortinga, 2006; Ziersch et al., 2005). Greater exploration is required of moderators and mediators along the pathways between social capital, health and the environments in which people live. Research needs to go beyond mere identification of moderators and mediators, however, as it is often the processes through which mediators and moderators operate that provide the greatest insights for intervention design and policy.

Another feasible avenue of research lies in action research or the evaluation of natural experiments. As populations continue to grow and increasingly congregate in urbanised cities, new developments and initiatives to revitalise or modify existing suburbs present valuable opportunities to monitor and evaluate their impact on the social fabric and on health (Wood et al., 2007). Interventions targeting environmental sustainability, transport reform and physical activity are pertinent examples of opportunities to track the consequential impacts on social capital.

Paralleling promising refinement of quantitative social capital research is emerging recognition of the value of qualitative or mixed method investigations of the inter-relationship between social capital, health and environments (Baum & Palmer, 2002; Boneham & Sixsmith, 2006; Cattell, 2001). As well as providing insightful narrative to

empirically derived findings, qualitative methods can be used to probe facilitators and impediments to social capital formation and maintenance within urban environments, with a view to informing intervention points.

## 7. Conclusions

Social capital is not necessarily defined by, or confined to, geographically bordered communities. However, the literature increasingly supports the contention of some links between social capital and the environments in which people live, and between social capital, physical environments and health. Tangibly, aspects of the physical environment impact on opportunities for social interaction and recreation and the formation of support networks. Less tangibly, perceptions of social isolation and inclusion, personal safety and friendliness are potentially influenced by the interchange between social capital and people's physical environments.

While social capital has sometimes been narrowly pigeonholed as a 'social' or 'warm fuzzy' phenomenon, the link between physical environments, social capital and health supports efforts to include infrastructure and policy measures in interventions to improve social capital. This might include advocacy for the development or maintenance of community infrastructure (such as a local library, school or child health centre) or public amenities (such as parks with playgrounds or a recreation centre) which all have inherent functional roles, but also serve as powerful conduits for social interaction and spawning networks of support.

It is axiomatic to conclude with recommendations for more research: for the precise pathways and mechanisms through which social capital exerts its influence and is influenced within the realm of physical environments are under explored and have significant relevance for policies and programs that seek to work through neighbourhoods as settings for improving health and wellbeing. Future iterations of social capital research could benefit greatly from the perspectives applied in the disciplines of environmental psychology, social ecology and community psychology to unpacking such mechanisms, thus contributing to our understanding of the place for social capital in the psychology of health and place.

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