Socially Healthy Ageing: The Importance of Third Places, Soft Edges and Walkable Neighbourhoods

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Abstract: Population ageing is a complex subject with implications for public policy and urban and regional planning. A key community responsibility of population ageing is to ensure the health and wellbeing of this cohort. In this respect, planning for socially healthy ageing is a critical area requiring urgent and substantial research. This paper discusses the impacts of physical neighbourhood environments on the social life — a component of social health — of older people. The research is focused on where, in the neighbourhood, the social life of older people takes place. It investigates the role of soft edges [transition zones between the private area inside the home and the public domain of the city], third places [social place that is not home or workplace] and walkable environments in the formation of different types of ties or relationships: strong, weak, and absent, among older people. Conclusions are based on data collected through observation and semi-structured interviews with 54 older people (aged 65 and over) living in three case study areas located in the city of the Gold Coast, Queensland, Australia. Findings align with much of the existing literature in that they reveal the importance of third places as meeting points. Soft edges and walkable areas are also found to be important in fostering frequent social interaction between older people.
Keywords: Third places, soft edges, walkability, older people

Introduction

Developing urban environments which are responsive to the social health of older people is a major concern for planners and policy makers. Social health is a significant component of overall health and well-being (WHO 1946) which plays a crucial role in the process of ageing. Ageing includes changes in lifestyle—such as "retirement, reduced mobility, illness, widowhood, moving house or taking on informal caring responsibilities"— which can lead to social isolation (AIHW 2013, p.253), and in turn to depression, low morale, and poor health (Brown 2003, Cornwell and Waite 2009). Conversely, social participation, social support, and in general a socially integrated lifestyle strongly contributes to health and well-being (WHO 2007, AIHW 2013), as well as the quality of life of people as they age (Borglin *et al.* 2005).

While the benefits of social health for an ageing population are widely recognised, there is a lack of research relating the social health of older people to the physical features of their neighbourhood environment. The concept of neighbourhood is generally understood in two ways: "practically and symbolically" (Blokland-Potters 2003, p.213). Referring to the former, a neighbourhood is a geographically localised area which can be defined by the "physical boundaries", "administrative boundaries or more pragmatic measures such as the size of local populations or the area within walking distance of home" (Kennett and Forrest 2006, p.715). From a symbolic perspective, the neighbourhood can be defined as the site of social encounters between residents and the formation of social networks (Schuck and Rosenbaum 2006). It is the symbolic definition of the neighbourhood that is of particular interest in this paper. The paper aims to reveal the importance of physical neighbourhood planning to promote socially healthy ageing. It is focused on how third places, soft edges and walkable environments impact three different types of social ties or relationships, strong, weak and absent (Granovetter 1973), among older people. Reference to older people in this research is to people aged 65 years and over. The terms: older people/residents/persons/adults and ageing population, used in different sections of this paper, all refer to people aged 65 years and over unless otherwise specified.

The paper begins by reviewing the literature on the importance of the physical environment to socially healthy ageing with particular focus on the role of third places, soft edges and the level of walkability of the neighbourhood. This is followed by the methodology and research methods section. The core of this paper is devoted to the findings of the research, highlighting the supporting role of different third places, pedestrian-friendly environments and soft edges in the social life of the research participants.

Planning and neighbourhood social life

Social health, along with physical and mental health are three main components of overall health and wellbeing (WHO 1946). Social life or sociability (e.g. friendships) is one of the main components of social health (Barrabee *et al.* 1955, Paykel *et al.* 1971, Gurland *et al.* 1972, Dohrenwend *et al.* 1973, Renne 1974, Greenblatt 1976) which can generally be classified into strong, weak, or absent ties. These three types of ties or relationships were first introduced by Granovetter (1973) in his theory of 'the strength of weak ties'. Granovetter (1973, p. 1361) argued that "the strength of a tie is a (probably linear) combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the

reciprocal services which characterise the tie". According to Granovetter (1973), strong ties are concentrated within clusters of friends, while weak ties (our acquaintances) connect different clusters of strong ties. He also defined absent ties as "both the lack of any relationship and ties without substantial significance, such as nodding relationship between people living on the same street" (P.1361).

This paper focuses on the strong, weak and absent ties of older people within their neighbourhood and the degree to which urban and environmental planning can influence the development of these ties and thus positively contribute to social health. Neighbourhood social ties which are also defined as neighbouring are formed due to the geographic availability of people (Grannis 2009). Movements including "imaginative travel, movements of images and information, virtual travel, object travel and corporeal travel" have caused place-based relations, like neighbouring, to decrease over time (Urry 2000, p.186). However, neighbourhoods are still important for some people, and in particular older people who often experience limitations due to health and mobility concerns. For these people, the neighbourhood environment is a critical arena where their social life takes place (Godfrey *et al.* 2004). While the physical urban environment has the capacity to impact on the neighbourhood social life of older people in many ways, the focus of this research is on the impacts of third places, soft edges and the walkability of the neighbourhood on three different types of ties among older people. Below is a summary of the literature on the importance of these neighbourhood features to social life, demonstrating how planning can contribute to promote the overall health and wellbeing of people, including the ageing population.

Third Places

Third places can be public open spaces, such as children's playgrounds, or urban squares, or indoor areas, such as cafes, community centres, restaurants and so on. According to Oldenburg (1989) a third place is not the first place (home) neither is it the second place (work/school); it is a place in which people can meet with others and start socialising. As he argued, a third place provides people with the opportunities for social experiences and interactions. He also advocated the third place as an important social space for retirees, as it facilitates their social life and provides them with opportunities to keep in touch with others (Oldenburg 1989, 1997). Cheang's (2002) research on the social life of older people in a fast-food restaurant revealed that the naturally occurring, autonomous relationships between older adults in the restaurant play an important role in their social life. A more recent study by Rosenbaum (2006) also showed the supportive role of a restaurant as a third place in the social life of older people. Research on third places and the social life of older people is limited. However, there is a raft of research focused on the positive social impacts of third places on people of all ages, which informs current and future studies on the social life of older adults and thus contributes to and extends knowledge in this filed. (See Hickman 2013, Matthews *et al.* 2000; Rosenbaum *et al.* 2007; Lawson 2004).

Walkable environments

Walking is advocated as an active mode of transport which can benefit older people both physically and socially. Theoretically, walkable, mixed-use neighbourhoods provide residents with more opportunities for interaction, intentional or accidental. Pedestrian-friendly neighbourhoods encourage spontaneous encounters, followed by short conversations or just waving hello in neighbourhood environments and they help to improve neighbouring relationship between residents (Leyden 2003). Lund's (2003) study confirmed the claim of New Urbanism that the provision of amenities within walking distance of residences encourages more pedestrian traffic and consequently increases the opportunities for social encounters and social interaction in the neighbourhood. Gehl (2010) also advocated pedestrianism as an important city policy to increase social interaction between people. He argued that supporting pedestrian traffic contributes to developing lively, safe, sustainable and healthy cities. Positive impacts of walkable neighbourhoods on the social life of residents have also been supported by studies undertaken by Du Toit *et al.* (2007) and Leyden (2003).

Soft Edges

Soft edges are semi-private transit areas between the private space (home) and the public area in the city. They include "front yards, porches, semi-private forecourts" (Gehl 1986, p.100,101) which link home and neighbourhood, both physically and psychologically (Taylor 1988). Soft edges encourage the presence of people in residential streets and facilitate opportunities for social encounters and social interactions between them (Gehl *et al.* 1977, Gehl 1986). Wilkerson *et al.*'s (2012) research confirmed the importance of soft edges to the social life of neighbours, and demonstrated that sidewalks and front porches are associated with a higher level of neighbouring. Soft edges, however, include a wide variety of spaces and the way they are designed has different impacts on the social life of residents. This is demonstrated in Al-Homoud and Tassinary's (2004) study on the level of social interaction between neighbours and the presence of semi-private spaces located at the front of detached houses. Their study highlighted that enclosing these spaces using territorial markers including landscaping, fencing,

decorating (e.g. yard furnishing), and signs encourages the use of them, and thus, increases opportunities for casual social interaction among neighbours.

Methodology

This paper draws upon data from a larger research project investigating associations between the physical features of urban neighbourhood environments and the social life of older people living in three case study areas, on the Gold Coast, Queensland, Australia. The findings of this research, in relation to third places, soft edges and walkable areas, constitute the focus of this paper. The three case studies included: Southport, Mermaid Water-Clear Island Waters and Hope Island. All these case studies have a significant ageing population profile. Population density, built-form patterns and accessibility, including the availability of public transport, are three key factors making these case studies distinct from each other. Southport is a relatively densely populated (18.11 persons per hectare (ABS 2011c)), mixed-use area, which under the current planning scheme is identified as the Central Business District. It is comprised of a variety of built-form patterns including apartments, attached, semi-detached, and detached houses, all in this paper referred to as 'conventional suburban neighbourhoods'. Southport also comprises some high-rise buildings; and a few gated master planned community (MPC) developments. This case study has a high level of public transport provision, including bus and light rail. Hope Island, on the other hand, has a low population density (5.93 persons per hectare (ABS 2011a)) and comprises a number of clearly demarcated gated master planned developments, built circa 2001 (.id 2011). Public transport on Hope Island is limited and not easily accessed given the pattern of residential development (gated). Mermaid Waters-Clear Island Waters sits somewhere in between these two case studies, with a population density of 13.61 persons per hectare (ABS 2011b). The built form pattern consists primarily of conventional suburban neighbourhoods including mainly detached and semi-detached houses; a few high-rise apartment buildings; and a few gated master planned developments. Public transport in Mermaid Waters-Clear Island Waters consists of buses with adequate service to the main roads. However, given the street network pattern of this case study, which is predominantly cul-de-sacs, bus services are not easily accessed by many residents. Different built-form patterns, in each case study area, from which the research population was recruited are illustrated in figure 1.
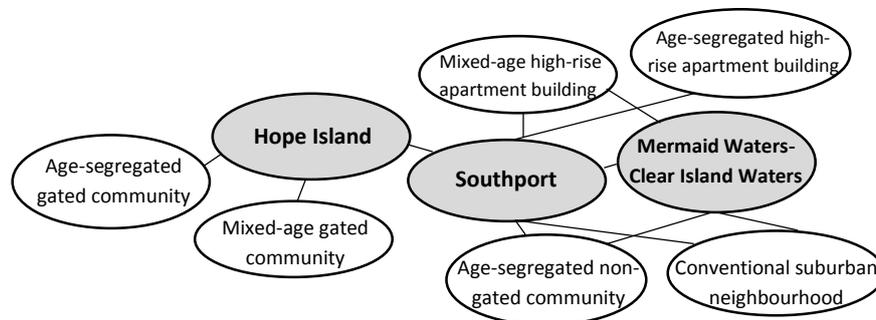

Figure 1: Different built-form patterns, in each case study area, from which the research population was recruited

Data was collected through conducting semi-structured interviews with 54 older people, aged 65 years and over. Observation was used to complement data from interviews (Hay 2000). It was undertaken at the same time as interviews and provided additional information about the characteristics of the three case study areas and how they respond to the social needs of older people. To conduct the interviews, ethics approval was received from Griffith University Human Research Ethics Committee. Participants were given consent forms and information sheets before the interview began. They remained anonymous and were given pseudonyms to ensure confidentiality. The majority of participants were invited through a letterbox drop. Convenience sampling (participants are selected because of their convenient accessibility to the researcher) and snowballing sampling (existing participants assist the researcher in identifying other potential participants) methods were also used in parallel to recruit an adequate number of participants. Out of 54 participants,19 people were from Southport, 20 from Mermaid Waters-Clear Island Waters and 15 from Hope Island. Participants included 21 men and 33 women. All of them were retired; 34 were doing some type of volunteering. Interviews lasted approximately 60 minutes and were digitally recorded. Questions were content-focused and dealt with the issues or areas relevant to the research questions (Hay 2000). Participants, from different built-form patterns, were asked about where, in the neighbourhood, their social interaction occurred. These questions were followed by open ended questions regarding how they perceived these meeting places

and the role of these places in the quality and quantity of their strong, weak, and absent ties. A series of questions were also asked regarding the third places which they frequented during a typical week of their life as well as the level of walkability of the neighbourhood environment and the degree to which this impact on their social interaction with other people.

The interview data and observation notes were analysed using QSR NVivo 10 data management software. A coding strategy was developed to highlight themes which characterised the impacts of the physical neighbourhood environment on the social life of the research population. The data was coded in different stages. Firstly, it was coded with regards to the research questions and themes extracted from the literature review. Data analysis was not limited to a deductive approach, which is only focused on testing themes extracted from the literature. It also involved an inductive approach, allowing new themes to emerge (Berg and Lune 2004). The second stage of data analysis included reviewing codes and forming themed clusters. Each cluster cohered around a very broad theme, for example third place. Sub-themes were then identified, for example mixed-use third places and local third place. The associations and relationships between the different themes and subthemes were also identified.

Findings

Data from semi-structured interviews and observation revealed the supportive role of third places, soft edges and walkable neighbourhood environments in the social life of the research participants. The remainder of this paper summarises the main findings of the research, highlighting the importance of neighbourhood planning in promoting social life of older persons. The first section presents the main characteristics of those third places that were the most frequented by the research participants. These include: mixed-use places; local third places; clubs; and the common area and leisure centres in MPCs and high-rise apartments. Discussion then moves on to highlight the supportive and important role of pedestrian-friendly neighbourhood environments and soft edges in fostering the social life of older people.

Third places and social life
Mixed-use places as social spaces

Mixed-use places, referred to by participants, generally comprised a shopping area, civic places like banks and a post office, and also cafes and restaurants. Participants described these places as important social spaces, which were convenient and offered efficiency, as they afforded them opportunities to undertake multiple tasks in a single location thus minimising the need to travel. For instance, Ruth said that "we go to Southport Park [shopping centre]. We usually combine going shopping. I take friends who don't have cars… So we'll go out and do the shopping and maybe have a cup of coffee together just as a little social bit in the middle of the shopping". As this research revealed, the participants tended to frequent the same local mixed-use centres, so were likely to make absent, and in some cases, weak ties with the sales assistants and occasionally other people who frequented these places. For participants, these third places tended not to produce strong ties instead, participants were more likely to meet people with whom they already had strong ties, produced through other activities and other places.

The importance of local third places

In line with the findings of Gardner (2011), this research showed the significance of local third places in the social life of the participants. While most of the participants, particularly those who still drove their own car, did not tend to restrict themselves to the local cafes and restaurants, when talking about other third places, the majority tended to go to the local ones. This was especially the case in regards to the third places such as churches, shopping centres, public libraries and clubs which were shown to play an important role in the social life of the participants. Clair highlighted the importance of the local church to her social life:

> …We come together at church and that's where I would meet others….I guess that's the thing about church. We don't just go into church and go home. We come to church. We're there for the worship service and then afterwards we are talking to each other, having a drink of coffee and having friendship time after church. So that is why at church activities we do talk to each other, and it's more than just seeing somebody over the room and maybe saying hi and that's all.

Participants' preferences to attend local third places were largely associated with decreasing driving capabilities. This frequently meant a limitation to the distance of travel and not choosing to drive in unfamiliar environments. When talking about the third places that she frequents, Mary said "I'm only driving a little bit around here, I don't drive any big distances any more". Shirley also pointed out that "I don't drive to Robina. I find daunting to drive around Robina. I guess it will come to me one day, but I

just find it daunting…" Both these reasons are supported by other research studies e.g. Alsnih and Hensher (2003), Liddle *et al.* (2008).

Clubs and a sense of community
The research also revealed the importance of club membership to the social life of the participants, particularly single older men and women, which was consistent with the findings of Stevens (2001) and Jerrome (1983). Lyn, a single older woman from a conventional suburban neighbourhood in Southport said: "...I belong to quite a few clubs because I don't have close family you see, so those clubs and those people are my family really". The clubs, favoured by the research participants, included the Returned and Services League, the University of the Third Age, singing clubs and bowls clubs. As the research revealed, the majority of these clubs are age restricted and thus create a convenient, and safe social space for older people. Tony emphasised the convenience of these clubs:

> Well there's a lady in there who's 97 I think, and still playing this carpet bowls.
> People have got walking sticks and… They can't bend over to pick up the bowl
> but they pick it up with this little mechanism, hand thing and put it in their hand.
> They can't get down like most people do and bowl. They can't bend over but
> they do it half stooped over. You can play this game to a good age...

Research revealed that participants' regular attendance at these clubs created a sense of community and provided them with opportunities to interact with other people and establish absent, weak and eventually strong ties. The participants who frequented clubs regularly had a high number of ties, particularly absent and weak ties with other club members. These ties were acknowledged as being important social relations in their daily lives. In response to a question about the significance of weak and absent ties established in clubs, Shirley pointed out:

> They are [important], it is lovely to talk to them [people with whom you have
> weak and absent ties] while you are there… That's why I go bowling. That's
> why I go to OzCare. That's why I go to the hobby shop. They are all important
> to me. Definitely I love people… It's nice to talk to them, here I am on my own,
> I've got to keep myself busy so that the time goes by, which I do.

Common areas and the leisure centres in MPCs and high-rise apartment buildings
This research showed that, the participants from both MPCs and high-rise apartment buildings, tended to have a high number of weak and absent ties within the physical boundaries of the development. Some participants from age-segregated MPCs perceived all people living in the development as being a weak or absent tie. Paul indicated:

> … With 227 houses [in the age-segregated MPC] there is always people that
> you see. So you can have a few chats with people time to time. If you lived in
> a suburbs, when we lived in Melbourne … in the same street there was
> probably two couple, or two houses with people that I would call friends…

Research findings revealed that the participants from MPCs and high-rise apartment buildings, especially those living in age-segregated developments tended to spend the majority of their outdoor time within the development boundaries. The majority of participants fulfilled most of their social needs by socialising with people in the common area and the leisure centre of the development which is consistent with the findings of the research undertaken by Tyvimaa (2011). Sarah, a resident of an age-segregated MPC reported that:

> So it [the age-segregated MPC] is a positive place to live. I enjoy it very much
> because I know that if I choose to, there is something happening every day.
> But there are things like bingo, I don't like bingo, games evening, cards, all
> things I can't do because I can't play cards. But I do go to the dinners, and
> they have celebrations. Olive turned 90 and they had a big party for Olive's
> birthday, and Friday, in two days time, they're having a breakfast with
> entertainment and a band, and dancing, because the manager is leaving.

Similarly, Joan, from an age-segregated high-rise apartment building stated:

> …I do all the activities that they have to offer....It is important… This [building]
> is now our little world, and I feel safe here. I like the people here. At 75 I don't
> need, I have no desire to go trips around the ridges to find something that
> suits. It is all here. Everything is here that I want. I do go out occasionally, but
> basically, this is our hub.

Walkability and social life
Not surprisingly, this research demonstrated that social interactions in a neighbourhood environment are not limited to third places. Many social encounters/interactions occur in public places and in particular on streets. This highlights the significance of planning and designing for pedestrian-friendly

streetscapes that facilitate social interactions between older adults. Participants reported they walked for both exercise and transport. The research revealed that walking increased the chance of encountering other residents, thereby, establishing absent and weak ties with people in the neighbourhood. The importance of walkable environments to the social life of older people was significant within the physical boundaries of MPCs. Margaret, living in an age-segregated gated community stated that: "I see a lot of people when I go for a walk every morning. I see a lot of people then and we all speak to each other". Walking dogs was also described by some participants as an activity which facilitated socialising. Sam, from a gated community, reported that: "…it is a very important part of our life, and if we didn't have the dogs we wouldn't be going out and meeting people like we do…" In a similar fashion, Ben from an age-segregated gated community indicated:

> …They all say "hello" and we can talk to them. So many I can't remember people's names. I remember their dogs' names better than them. Lots of people we say "hello" and chatted with the dogs and meet with the dogs going for a walk and things…

Both the interview and observation data demonstrated a high level of walkability in MPCs. Most of the participants from these developments reported that they walk almost every day within and around the development. This was particularly the case for those developments which had communal leisure centres to which residents could walk. The high level of walkability within these developments also correlated with residents' sense of safety. Almost all of the MPC participants, from all three case study areas, perceived the development to be very safe. Furthermore, as participants indicated, low speed, shared streets and safe footpaths provided an inviting area for them to walk and converse with others. Sam stated: "I know I could walk round the village and fall over something and somebody would help me. There would be somebody would come and help me, even though I may not know who they are or ever seen them before. It's that sort of place". These findings are consistent with previous research about older adults and environmental walkability (Booth *et al.* 2000, Michael *et al.* 2006, Gallagher *et al.* 2010, Nathan *et al.* 2013). In contrast, conventional suburban neighbourhood patterns were seen to be restricting social interactions as destinations are not always within a walkable distance, the footpath is often of a low quality or not at all, leading to a sense of feeling unsafe.

Soft edges and social life

Walkability is an important component of addressing social health and so too are soft edges. Consistent with the findings of Gardner (2011), this research revealed the supportive role of front gardens in creating opportunities for social interaction between neighbours and forming weak and absent ties. This research found that front gardens operate as soft edges when they are not enclosed by walls, maintaining both visual and physical connections between the private space and the public realm. A number of the participants stated they converse with neighbours in the street while they themselves are working in the garden. Anne, a resident of a detached house in a conventional neighbourhood indicated:

> "…I work outside my house sometimes, the garden sort of stretches out a bit and people walk past and, I have no idea who they are but they stop and say "Oh you've got a big job on there" and things like that. I don't really know who they are, but there are lots of friendly people around…"

This was particularly the case in MPCs, especially age-segregated communities, since these residents generally walk around the development more. Amy, stated that:

> "…if you are going for a walk, and somebody was in the garden, you would say hello and maybe have a chat with them, whoever they might be, whether you know their name or whether you don't. Because everybody in here is pretty friendly…"

In addition to front gardens, the letterbox is described by most MPC participants as a meeting place which facilitates social interaction. Maggie indicated:

> … If you go up to the letterbox. That's a meeting place. Everybody that is up there… The postman comes at two o'clock. So if you happen to be up there, you see people. It's not long conversations, but it's "Oh how you going Maggie", the weather and things like that.

Conclusion

This paper focused on the links between physical neighbourhood features, specifically third places, soft edges and walkable areas, and the level of social interaction and social engagement of some older people living on the Gold Coast, Queensland, Australia. The findings of this research can contribute to forming policies for micro and macro-level planning schemes, aimed at supporting social health and consequently improving the overall health and well-being of the ageing population.

Using a qualitative methodology, data from semi-structured interviews and observation revealed third places were important social spaces to form the three different ties for older people. Third places that were important to the social life of participants included: mixed-use centres which cater for multiple needs in a single location; local third places which are easily accessible; third places located within the physical boundaries of MPCs and high-rise apartments such as leisure centres; clubs, particularly local ones, which foster a sense of community and increase the opportunities, particularly for single older men and women, to establish social ties with other people. Pedestrian-friendly neighbourhood environments were also found to afford participants opportunities to encounter and converse with others leading to the formation of weak and absent ties. This research also demonstrated that soft edges, including front gardens and mail collection points create opportunities for social interaction between neighbours and form weak and absent ties. This was particularly the case in MPCs, especially age-segregated communities that were frequently found to be pedestrian-friendly environments which encourage walking and so promote social interaction among neighbours.

References

.Id, 2011. *Community profile, Hope Island* [online]. Available from: http://profile.id.com.au/gold-coast/about?WebID=300 [Accessed 4 June 2015].

ABS (Australian Bureau of Statistics), 2011a. *2011 Census quickstats, Hope Island.* Canberra: ABS.

ABS (Australian Bureau of Statistics), 2011b. *2011 Census quickstats, Mermaid Waters-Clear Island Waters.* Canberra: ABS.

ABS (Australian Bureau of Statistics), 2011c. *2011 Census quickstats, Southport.* Canberra: ABS.

AIHW (Australian Institute of Health and Welfare), 2013. *Australia's welfare 2013.* Canberra: AIHW.

Alsnih, R. and Hensher, D.A., 2003. The mobility and accessibility expectations of seniors in an aging population. *Transportation Research Part A: Policy and Practice,* 37 (10)**,** 903-916.

Barrabee, P., Barrabee, E.L. and Finesinger, J.E., 1955. A normative social adjustment scale. *The American Journal of Psychiatry,* 112 (4)**,** 252-259.

Berg, B.L. and Lune, H., 2004. *Qualitative research methods for the social sciences.* Boston: Pearson.

Blokland-Potters, T. V., 2003. *Urban Bonds.* Cambridge: Polity Press.

Booth, M.L., Owen, N., Bauman, A., Clavisi, O. and Leslie, E., 2000. Social–cognitive and perceived environment influences associated with physical activity in older australians. *Preventive medicine,* 31 (1)**,** 15-22.

Borglin, G., Edberg, A.-K. and Rahm Hallberg, I., 2005. The experience of quality of life among older people. *Journal of Aging Studies,* 19 (2)**,** 201-220.

Brown, W., 2003. *Promoting healthy ageing in australia.* Canberra: Department of Education, Science and Training.

Cheang, M., 2002. Older adults' frequent visits to a fast-food restaurant: Nonobligatory social interaction and the significance of play in a "third place". *Journal of Aging Studies,* 16 (3)**,** 303-321.Cornwell, E.Y. and Waite, L.J., 2009. Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior,* 50 (1)**,** 31-48.

Dohrenwend, B.S., Dohrenwend, B.P. and Cook, D., 1973. *Ability and disability in role functioning in psychiatric patient and non-patient groups.* London: Oxford University Press.

Du Toit, L., Cerin, E., Leslie, E. and Owen, N., 2007. Does walking in the neighbourhood enhance local sociability? *Urban Studies,* 44 (9)**,** 1677-1695.

Gallagher, N.A., Gretebeck, K.A., Robinson, J.C., Torres, E.R., Murphy, S.L. and Martyn, K.K., 2010. Neighborhood factors relevant for walking in older, urban, African American adults. *Journal of aging and physical activity,* 18 (1)**,** 99-115.

Gardner, P.J., 2011. Natural neighborhood networks—important social networks in the lives of older adults aging in place. *Journal of Aging Studies,* 25 (3)**,** 263-271.

Gehl, J., 1986. "Soft edges" in residential streets. *Scandinavian Housing and Planning Research,* 3 (2)**,** 89-102.

Gehl, J., 2010. *Cities for people.* Covelo: Island Press.

Gehl, J., Thornton, S. and Brack, F., University of Melbourne. Faculty of Architecture, Building, and Town & Regional Planning, 1977. *The interface between public and private territories in residential areas: A study by students of architecture at Melbourne University.* Melbourne: Departmnt of Architecture and Building, Melbourne University.

Godfrey, M., Townsend, J. and Denby, T., 2004. *Building a good life for older people in local communities: The experience of ageing in time and place.* York: Joseph Rowntree Foundation.

Grannis, R., 2009. *From the ground up: Translating geography into community through neighbor networks.* Princeton: Princeton University Press.

Granovetter, M.S., 1973. The strength of weak ties. *American Journal of Sociology***,** 78 (6), 1360-1380.

Greenblatt, H.N., 1976. *Measurement of social well-being in a general population survey.* Berkeley: California State Department of Health.

Gurland, B.J., Yorkston, N.J., Stone, A.R., Frank, J.D. and Fleiss, J.L., 1972. The structured and scaled interview to assess maladjustment (ssiam): I. Description, rationale, and development. *Archives of General Psychiatry,* 27 (2)**,** 259-264.

Hay, I., 2000. *Qualitative research methods in human geography.* Oxford: Oxford University Press.

Jerrome, D., 1983. Lonely women in a friendship club. *British journal of Guidance and Counselling,* 11 (1)**,** 10-20.

Kennett, P. and Forrest, R., 2006. The neighbourhood in a European context. *Urban Studies, 43*(4), 713-718.

Leyden, K.M., 2003. Social capital and the built environment: The importance of walkable neighborhoods. *American Journal of Public Health,* 93 (9), 1546-1551.

Liddle, J., Turpin, M., Carlson, G. and Mckenna, K., 2008. The needs and experiences related to driving cessation for older people. *The British Journal of Occupational Therapy,* 71 (9)**,** 379-388.

Lund, H., 2003. Testing the claims of new urbanism: Local access, pedestrian travel, and neighboring behaviors. *Journal of the American Planning Association,* 69 (4)**,** 414-429.

Michael, Y.L., Green, M.K. and Farquhar, S.A., 2006. Neighborhood design and active aging. *Health & place,* 12 (4)**,** 734-740.

Nathan, A., Wood, L. and Giles-Corti, B., 2013. Environmental factors associated with active living in retirement village residents findings from an exploratory qualitative enquiry. *Research on aging,* 35 (4)**,** 459-480.

Oldenburg, R., 1989. *The great good place: Cafés, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day.* New York: Paragon House.

Oldenburg, R., 1997. Our vanishing "third places". *Planning Commissioners,* 25, 6-10.

Paykel, E.S., Weissman, M., Prusoff, B.A. and Tonks, C.M., 1971. Dimensions of social adjustment in depressed women. *The Journal of Nervous and Mental Disease,* 152 (3)**,** 158-172.

Renne, K.S., 1974. Measurement of social health in a general population survey. *Social Science Research,* 3 (1)**,** 25-44.

Rosenbaum, M.S., 2006. Exploring the social supportive role of third places in consumers' lives. *Journal of Service Research,* 9 (1)**,** 59-72.

Schuck, A. and Rosenbaum, D.P., 2006. Promoting safe and healthy neighborhoods: What research tells us about intervention. *In*: K. Fulbright-Anderson and P. Auspos eds. *Community change: Theories, practice, and evidence.* Washington, D.C.: The Aspen Institute.

Stevens, N., 2001. Combating loneliness: A friendship enrichment programme for older women. *Ageing and Society,* 21 (02)**,** 183-202.

Tyvimaa, T., 2011. Social and physical environments in senior communities: The finnish experience. *International Journal of Housing Markets and Analysis,* 4 (3)**,** 197-209.

WHO (World Health Organization), 1946. *Preamble to the constitution of the WHO as adopted by the International Health Conference, New York, 19–22 June 1946.* Geneva: WHO.

WHO (World Health Organization), 2007. *Global age-friendly cities: A guide.* Geneva: WHO.