

Public Spaces

How this domain relates to active ageing

The physical and social environment plays an important role in active ageing (World Health Organisation, 2002b). Public spaces, including parks, streets, markets, and cultural centers, are essential spaces for active ageing providing opportunities for social and civic participation and engagement in life for older adults.

Public spaces and health:

Place is a key concept in geography that is described fundamentally as a “portion of geographic space” (Gesler & Kearns, 2002, p.4). Considered an amalgam of social, cultural, historic, political, economic and physical features, places make up the meaningful context of human life (Cutchin, 2005). From this perspective, ‘place’ is conceptualized not as a simple, static container or backdrop to life but instead as a kind of process in which “social relations and identity are constructed” (Duncan, 2000, p.582). Research from various disciplines including geography, health promotion, anthropology and gerontology, illustrate that place is important to both health (status and behavior) and aging (processes and experiences) (Moon, 1995).

Public space has been linked to health in various ways in the literature and research suggests participation in these spaces can promote the mental as well as physical health of older adults (Jacobs et al., 2008; Takano, Nakamura, & Watanabe, 2002). A review of the literature reveals three ways in which the public space-health relationship operates: a) public spaces that are natural environments or have natural elements can promote well-being among users, b) individual levels of physical activity are increased through participation in public spaces and, c) opportunities for social engagement are enhanced in these environments (Sugiyama & Thompson, 2007b; Sugiyama, Thompson, & Alves, 2009).

The healing qualities of the natural environment

There are two key areas of literature that promote and explore the notion that certain places maintain health-benefiting qualities – the ‘therapeutic landscape’ and the ‘restorative environment’ literatures. Therapeutic landscape was introduced by Gesler (1992) to describe places with established reputations for healing such as Epidaurus, Greece (Gesler, 1993) and Bath, England (Gesler, 1998). The concept was later expanded by Williams (1999) to include places that promoted and maintained health. The study of restorative environments is a subfield of environmental psychology concerned with the recuperative qualities of different environments, and in particular

how they affect mental health including attention fatigue and stress (Hartig, 2003). One of the key findings of both bodies of knowledge is that engaging in nature, or at least elements of the natural world, can enhance health.

Nature as 'healer' is an idea with historical as well as cultural credibility; the healing powers associated with the natural environment are well-documented in many societies (Gesler & Kearns, 2002, p.121). Research exploring the health-benefits of natural environments including gardens (Milligan, 2004), parks (Palka, 1999), and rural countryside (Conradson, 2005) and findings demonstrate these places can provide respite and facilitate relaxation and spiritual restoration. Empirical research illustrates visiting natural environments including forests, parks, and green spaces can alleviate stress, restore energy, and enhance mood (Kaplan, 2001; Korpela & Ylen, 2007; van den Berg, Hartig, & Staats, 2007). For example, researchers examining individual-physiological response to natural environments report engaging with nature (walking in the woods), can cause a rapid decline in diastolic blood pressure (i.e. reduced stress) (Hartig, Evans. 2003); this was also true, although not to the same extent, among participants who viewed nature (sat in a room with tree views). In other work it has been suggested that passing through a natural setting when moving from one place to another may provide a respite that, although brief, nonetheless interrupts a process of "resource depletion" (van den Berg et al., 2007, p.88).

Examinations of the relationship between the natural landscape and health has extended to urban areas where findings reveal health benefits associated with urban parks, community gardens, green spaces and tree-lined streets. In work with older adults specifically, the availability and access of green space has been linked to positive health outcomes:

- Findings from a study of impoverished older adults living in inadequate housing in barren inner-city neighbourhoods report: exposure to green common spaces (places with grass and trees) was associated with well-being, and in particular promoted social interaction among study participants (Kweon, Sullivan, & Wiley, 1998).
- Recent epidemiological research indicates neighborhood green space is associated with positive health outcomes including self-reported health status (de Vries, 2003) and longevity. Conducting a cohort study in Japan (Takano et al., 2002), researchers found living in areas with walkable public green spaces increased the longevity of urban senior citizens independent of their age, sex, marital status, baseline functional status, and socioeconomic status (Takano et al., 2002, p.913).
- Kweon, Sullivan and Wiley (1998) interviewed 91 inner city older adults (between the ages of 64 and 91) in Chicago to examine the effects of natural environments on older adults well being. Findings suggest spending time in common spaces, and in particular common spaces with more trees and grass, is associated with higher levels of social integration among elderly study participants.
- Researchers in England explored the extent to which communal gardening activity may be beneficial to the health and mental well-being of older people (Milligan, Gatrell, & Bingley, 2004). Findings from the intervention study illustrate communal gardening contributes to the social inclusion of older people, benefited their physical health, and also enhanced their lives at a deeper, emotional and experiential level.

Public spaces and physical activity for older adults

Engaging in public spaces requires movement (most often walking) and it is well-documented that a physically active lifestyle (that includes walking) is a key contributor to healthy aging (Rowe & Kahn, 1998); (Fisher & Li, 2004; Rowe & Kahn, 1998; Simonsick et al., 2005; Weuve et al., 2004; Wong et al., 2003). Access to public spaces such as parks and streets has been linked to improved individual health [e.g. cardiovascular disease (Diez Roux, 2003); depression (Berke et al., 2007; Evans, 2003)] and functional ability. One of the established pathways to improved health outcomes is the positive relationship between engagement in public places and increased level of physical activity (in particular walking). Studies exploring the ways in which public places promote activity shift the level of analysis from individual to environmental characteristics (e.g., green spaces and neighborhoods) highlighting what has been referred to as the 'walkability' of places (Frank, Andresen, & Schmid, 2004; Institute of Medicine and Transportation Research Board, 2005).

Studies illustrating activity levels for urban elderly are influenced by both the design and the availability of public spaces. Findings from research with urban elderly highlight the availability of local shopping areas, pedestrian infrastructure and the attractiveness of neighborhoods (gardens and interesting things to look) as key elements associated with increased levels of activity (Y. L. Michael, M. K. Green, & S. A. Farquhar, 2006). Research has found the opposite is also true, i.e., that poorer-quality neighborhood environments are associated with increased risk of loss of physical function in older adults (which researchers associate with lower levels of physical activity) (Balfour & Kaplan, 2002). The link between physical activity levels and public recreation places in elderly has been reported elsewhere: in a survey study of 449 randomly selected older adults researchers found one of the strongest environmental factors associated with improved levels of physical activity was "local opportunities to walk", and in particular access to a park, recreation center, track, golf course, or tennis court (Booth, Owen, Bauman, Clavisi, & Leslie, 2000).

Social interaction and public spaces

Participation in public spaces often means engaging (either directly or indirectly) with others. Although there has been some research to identify the potential for negative experiences during social interactions (Rook, 1984, 2003), most people seek out others and feel their lives are improved as a result. Indeed, as William Whyte (1980), an urban sociologist with over 40 years experience observing people in public spaces writes, "What attracts people most, it would appear, is other people".

Social interaction (described earlier in this document and understood to be beneficial to the health of older adults) is a common experience in public spaces where the intention is to provide communal places that are for the enjoyment and benefit of all citizens. In the literature, the social experiences found in public places are described as significant predictors to overall well-being: Based on twelve months of field work (observations, in-depth interviews) examining peoples everyday relationships with everyday public spaces (shopping streets, parks and markets), Cattell et al., (2008) writes:

The beneficial properties of public spaces are not reducible to natural or aesthetic criteria. Social interaction in public spaces can provide relief from daily routines, sustenance for people sense of community, opportunities for sustaining bonding ties or making bridge, and can influence tolerance and raise people's spirits (p. 544).

Engaging in public spaces is understood as important and health-benefiting for most people regardless of age however may be particularly important for older adults many of whom live alone, are no longer employed, and may have less opportunity than their younger counterparts to engage socially with others (Gardner, forthcoming). For example, Scopellite and Giuliani's (2004) research on restorative environments across the lifespan reports that sociality may play a particularly important role in shaping the restorative experiences of elderly people (p.434). Cheang's (2002) research with a group of older adults who meet regularly at a fast food restaurant suggests their scheduled informal social gatherings provide play, structure, meaning and promotes their overall mental well-being. Conradson's (2005) study of elderly residents attending a respite care centre in rural England illustrate the benefits of attending are improved (for some individuals) when opportunities for meeting new people and social interaction are provided.

To summarize, public places are an important 'place of aging'. Research illustrates going out, moving beyond the (private) home and into public spaces, is an important health promoting activity for older adults (Peace, Holland, & Kellaher, 2005, p.200). Interestingly, this may be true regardless of where people go or what they do in these public environments. For instance, in a recent study researchers demonstrated that simply going out of the house on a daily basis (regardless of what you do) predicts long term functional and health benefits among ambulatory older adults (Jacobs et al., 2008). In a longitudinal study (n=605) of independent ambulatory community dwelling older adults (aged 70-77), Jacobs reports leaving the house daily, and independently, predicts preservation of function, urinary continence and good self-rated health (p.268).

Key Factor: Access

Although research on the specific ways in which older adults engage with public places (including where, when and how) is limited, there has been some work to suggest older adults in particular seek out public places, and some of their preferred public places are retail shops and services, restaurants and cafés, cultural establishments as well as city-center public spaces such as parks and squares (Y. L. Michael et al., 2006; Valdemarsson, Jernryd, & Iwarsson, 2005). Summarizing the literature in this area highlights access – both physical and social – as one of the most salient factors predicting the relationship between public spaces and health for older adults.

Physical Access

For older adults, many of whom experience some mobility limitations, physical accessibility is a significant factor in the opportunities as well as the patterns of use, of

public spaces. The physical (e.g., inclement weather, hilly topography) environment as well as city and regional planning and design (e.g, pedestrian pathways, seating, and public transit systems) play a role in the degree to which functional ability is a barrier to engaging in public spaces.

In a review of the literature, Turel and colleagues (2007) identify several common challenges to accessing public spaces for older adults: distance between destinations, difficulty in walking, poor sidewalks, lack of places to rest, and fear of crime (p.2036). Barriers to access such as these means that proximal spaces (those within walking distance to home), become increasingly significant public places for older people. Research has shown 60-70% of people using a park live within 800m of it (Stoneham, 1996), and local or neighborhood parks are likely to be the most frequent used among elderly residents (Turel et al., 2007, p.2036). Researchers (Turel, p. 2037) evaluating older adults interactions with public open spaces outline several important design criteria: Ramps, stairs, pavements, level crossings, under and over pass, orientation board, and treed streets. When asked "what are the most frequent problems you meet in public open spaces, the most common answers among elderly participants are: pavement and streets (21%), pollution (21%), safety (18%), poor maintenance (10%), and traffic (8%).

In a study investigating preferences and frequencies to public facilities (Valdemarsson et al., 2005), several key problem areas associated with public environments were identified by elderly participants: surface materials, curb cuts, lack of seating, traffic and lack of crossings, obstacles in pedestrian areas, lighting, and, in terms of access to shops and public buildings, the steps at entrances, heavy doors and narrow entrances were identified (p.22). Researchers found more problems were perceived along walking routes in the public outdoor environment than in the public facilities per se (p. 15). Indeed, those exploring the pathway from impairment to disability conclude: "If street quality could be improved, even somewhat, for those adults at greatest risk for disability in outdoor mobility, the disablement process could be slowed or even reversed" (Clarke, Ailshire, Bader, Morenoff, & House, 2008, p.506). Falling, as well as the fear of falling, due to improperly designed or maintained sidewalks and other pedestrian pathways has also been identified as a barrier to public spaces for older adults. In a participatory action study (Gallagher & Scott, 1997), researchers compiled data over a nine month period on the location and nature of pedestrian slips, trips, falls and potential hazards; of the 533 people who reported a slip, trip or fall, the average age=65 years; 75% said they suffered an injury and 55% required medical attention. The most frequently reported fall locations were sidewalks and crosswalks.

There has been some work, particularly in schools of architecture, engineering and urban planning, to develop design principles and practices that reduce barriers for older people and others with disabilities. Predicated on the notion that Western cities are characterized by a "design apartheid" where the form and design of buildings and open spaces are inscribed by the values of an able-bodied society, models of "emancipatory architecture" (such as universal design and transgenerational design) approach space

as socio-physical thus requiring both social as well as physical “barrier free” design (Imrie, 1998).

Social Access:

Access to public spaces can be restricted through social barriers (e.g., ageism and ableism). From this perspective although a space may be physically accessible, given its meanings it may be *experienced* by certain people or groups as oppressive or inaccessible – a place described by Glenn Smith (1999) as “a disabling space of values” (p.63).

Peter Freund (2001) writes about social barriers in urban environments in his work on the ‘disabling city’. Spaces, according to Freund, are disabling when activity sites (work places, homes, shops, public spaces and transport sites) are separated from each other by barriers or distance (requiring a great deal of mobility)” (p. 696). He argues that space in society is not neutral, but rather political in the priority it gives, for example some transport modalities (cars), and in the way it ‘handicaps’ others (walking). Similarly, the work of geographer Glenda Laws (1995a; Laws, 1997; Laws & Radford, 1998) challenges us to reflect on the idea that as we age, our place in society changes, both materially and metaphysically. Using the concept of ‘spatiality’, she argues that the material spaces and places in which we live, work, and engage in leisure activities are age-graded and, in turn, age is associated with particular places and spaces. This “age-segregation” is integral to the process of identity formation by both older individuals and other social groups who perceive elderly people in particular ways. Law’s argues that age segregation is produced by limitations on accessibility, mobility (both metaphorical and physical) and motility (an individuals’ body potential to move) (Laws, 1997, p.93).

A lack of clean, accessible and safe toilets has been identified as both a physical barrier as well as socially discriminatory practice. According to the World Toilet Organization’s work on social equity and inclusion, older adults, care givers of young children, disabled people, and people with chronic health problems need easy access to suitably equipped public toilet facilities. A lack of accessible and good public toilets affects not only affects the quality of cities and the opportunities available to certain groups of people, it also reduces the dignity and quality of people’s lives.

Access to the outdoor environment plays an important role in the health and well-being of older people (Kellaher, Peace, & Holland, 2004). Improper design separates older adults from social life, narrowing their life circles (Turel, p.2044).

Public Spaces from a NYC perspective

According to the Project for Public Spaces (a New York City organization with over 30 years experience in designing, evaluating and promoting public places), “New York is a great city for two important reasons – its wealth of public destinations and the energy of its citizens”. According to the Project for Public Spaces, if city government and the

private sector build on these assets, New York's neighborhoods and districts will continue to flourish.

New York maintains some of the most recognized and established public spaces in the world including Central Park, Times Square, the Metropolitan Museum of Art and Fifth Avenue (shopping). Often thought of as the ultimate urban environment, New York City is actually the greenest city in the country. Over 25% of the city is parkland, managed by the New York City Department of Parks and Recreation (Parks) (Design Trust for Public Space website http://www.designtrust.org/projects/project_08parks21c.html)

According to the NYC Department of Parks and Recreation, New York City has more than 1,700 parks, playgrounds, and recreation facilities across the five boroughs. Parks properties range from swimming pools to wetlands and from woodlands to skating rinks (nycgovparks.org/sub_faqs/faq.html). It can be argued that outdoor public places such as parks play a significant role in the quality of life and well-being of New Yorkers, many of whom live in small apartments with no yards or outdoor space (REF).

Access issues and barrier free design principles are important in New York City as an estimated 2,537,000 people in New York have a disability (14.6% of the population age 5 and over). The proportion of older adults with a disability is much higher; based on data from the 2005 American community survey 42.8% of New Yorkers over the age of 65 have a disability. (American Community Survey, 2005) (http://pascenter.org/state_based_stats/state_statistics_2005.php?state=newyork&project).

Pedestrian safety in New York's busy urban environment has been identified as a key concern and represents a significant barrier to public spaces. A recent New York study conducted by Transportation Alternatives (2004), report seniors are in dangerous situation as they cross certain busy intersections in the city. Examining six intersections in four neighborhoods researchers found the average walking speeds of elderly residents were a full foot slower per second (3 ft/sec) than the guidelines used by the city for traffic signals (4 ft/sec). Study recommendations include modifying signal timing around senior centers and installing pedestrian refuges or medians with benches on wide streets (greater than 70 feet).

Objective for Action: To design the built environment in such a way that it can be comfortably used by the widest range of bodies possible and public spaces in particular must be safe, aesthetic, comfortable and usable by all citizens regardless of age or ability.

"Older people are at risk of becoming excluded from important domains of society if they are not able to participate in the public arenas" (Lilja and Borell as quoted by Valdemarsson, 2005). An outdoor environment, which makes going outdoors easy and enjoyable, is conducive to a more active lifestyle and better quality of life (Sugiyama & Thompson, 2007a).

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