The use of amenities in high density neighbourhoods by older urban Australian residents

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HIGHLIGHTS

► This study's high density environments are not homogenous.
► Everyday activities for older people are often outside their local neighbourhoods.
► Older people rely on private motor vehicles for everyday activity.
► Issues with availability and access to local amenities inhibits local participation.
► Age-friendly urban design is important for older people to successfully age in place.

ABSTRACT

Like other major cities, Brisbane (Australia) has adopted policies to increase residential densities to meet the liveability goal of decreasing car dependence. This objective hinges on urban neighbourhoods being amenity-rich spaces, reducing the need for residents to leave their neighbourhood for everyday living. While older people are attracted to urban settings, there has been little empirical evidence linking liveability satisfaction with older people's use of urban neighbourhoods. Using a case study approach employing qualitative (diaries, in-depth interviews) and quantitative (Global Positioning Systems and Geographical Information Systems mapping) methods, this paper explores the effect of the neighbourhood environment and its influence on liveability for older urban people. Reliance on motor vehicles and issues with availability and access to local amenities inhibit local participation for older people. Highlighting these issues furthers our understanding of the landscape planning and design factors that make urban neighbourhoods more liveable for older residents.

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1. Introduction

In recent years there has been increasing recognition of the need to improve the quality of cities and urban neighbourhoods in reference to supporting an ever-increasing ageing society (see Australian Local Government Association, 2006; Burton & Mitchell, 2006; Department of Health and Ageing, 2006; Inclusive Design for Getting Outdoors, 2007a, 2007b; World Health Organisation, 2007). There has been growing attention given to the urban neighbourhood environment of older people not only in gerontology but also across a wide range of disciplines including geography, urban design, transport studies and public health (Day, 2010; Ziegler & Schwanen, 2011). This cross-disciplinary interest is fuelled by the inter-related factors of increasing urbanisation and population

ageing (Beard & Petitot, 2010; Lui, Everingham, Warburton, Cuthill, & Bartlett, 2009; Smith, 2009) and the significant challenges these trends pose for landscape planning and design.

With the losses in functioning associated with the ageing process, the quality and type of environment becomes a significant factor in determining well-being and independence of older people (Smith, 2009; World Health Organisation, 2007). The design of the neighbourhood and provision of neighbourhood amenities can enhance or inhibit participation and are especially important for older people to be able to continue to age in place (Judd, Olsberg, Quinn, Groenhart, & Demirbilek, 2010). While there is limited research evidence related to access to urban neighbourhood amenity among older people (Quinn et al., 2009), projects undertaken in the United Kingdom and in Australia identify age-friendly built environment design approaches (Burton & Mitchell, 2006; Inclusive Design for Getting Outdoors, 2007a, 2007b; Judd et al., 2010). Many western governments are developing strategies for age-friendly cities (see Australian Local Government Association, 2006; Department of Health and Ageing, 2006; Inclusive Design

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for Getting Outdoors, 2007a, 2007b; World Health Organisation, 2007) and are pursuing urban planning policy aimed at reducing the physical separation of daily activities with a more effective integration of land use and transport (Neal, 2003). Policies aimed at changing the physical urban neighbourhood environment in ways that increase ready access to amenities assumes an improvement in the experience of liveability for residents within that neighbourhood (McCrea, Shyy, & Stimson, 2006). While there is no universally accepted definition of liveability, it can be broadly defined as "the well being of a community and represents the characteristics that make a place where people want to live now and in the future" (Victorian Competition and Efficiency Commission, 2008). The purpose of this paper is to explore the effect of the neighbourhood environment and its influence on liveability for older urban residents.

1.1. An ecological perspective of ageing

An ecological perspective of ageing "assumes an interplay between an individual's functional capacity, adaptation, and their physical and social environment" (Beard & Petitot, 2010, p. 430). There are a number of models which could be seen to embody such a theoretical foundation. For example, urban consolidation models, such as urban village and smart growth, with planning designs that co-locate residential and other uses around transport nodes, promote easy local access to diverse amenities and public transport which may encourage older people to maintain social networks and remain engaged with their local community. Similarly, policy initiatives that seek to enforce the permanent removal of impediments to walking, including street crossings that do not allow older people or people with disability enough time to cross, deteriorating footpaths or other physical barriers are instrumental in older people's ability to age in place (Frumkin, Frank, & Jackson, 2004). These issues relate to liveable neighbourhoods, universal design and also feature strongly in the healthy cities and age-friendly cities agenda (Inclusive Design for Getting Outdoors, 2007a, 2007b; National Heart Foundation of Australia, 2009; World Health Organisation, 2007) for improving the design of cities and neighbourhoods to be more conducive to ageing in place (Beard & Petitot, 2010).

It is broadly recognised that ageing in place (growing older in one place without the need to move as a result of health impacts) is in the interests of both older people and the government (Judd et al., 2010). The independence, health and wellbeing of older people are advanced by ageing in place and there is a reduced economic burden on government through reduced demand for institutionalised aged care. While a quality environment is a right requiring no empirical justification, social policy and social change needs to be driven by a better understanding of what constitutes a 'quality' environment in which older people are committed to ageing in place (Lawton in Smith, 2009; Rosso et al., 2011). The need to better understand older people's experiences is in part driven and supported by research that suggests that environment matters (Rosso et al., 2011; Smith, 2009).

Environmental gerontology, an ecological perspective of ageing, has been increasing in importance over the past few decades (Day, 2010; Peace, Holland, & Kellaher, 2011; Peace, Wahl, Mollenkopf, & Oswald, 2007; Smith, 2009). While acknowledged for expanding the body of knowledge pertaining to older people's environments and extending the methods used in this topic area (Smith, 2009; Wahl & Weisman, 2003), it has also been criticised for having no standard methodology or theoretical approach (Kendig, 2003), relying too heavily on quantitative methods (Wahl & Weisman, 2003) and for predominantly focusing on micro-environments (Kendig, 2003). Kendig (2003, p. 612) has argued for research to be expanded beyond the micro-environment to urban neighbourhoods, cities and regions especially in light of "important

macro-dimensions to change, such as ageing of the baby boom cohort". The term 'urban' is used in this study in a specialised sense to refer to inner-city, high density environments/neighbourhoods (a minimum of 30 dwellings per hectare).

1.2. The study of the neighbourhood setting

While the term "neighbourhood" is used in everyday conversation it lacks any single or widely agreed definition. Neighbourhoods are comprised by residence and home-related facilities that are in close proximity and which serve residential needs (Kearns & Parkinson, 2001). Characteristics of proximity of access to everyday needs, influenced by both distance and transport infrastructure, could be considered a widely acknowledged definitional attribute of neighbourhood (Galster, 2001) especially as it relates to neighbourhood liveability (Jacobs, 1961). Physical approaches to neighbourhoods and neighbourhood liveability are often discussed relative to their walkable proximity to some form of centre (institutional, educational, retail or other public facility) (Galster, 2001). Walkable proximity is difficult to define geographically due to variables such as the age and ability of residents, the state of the streetscape, and the topography of a given urban area. Notwithstanding these qualifications, for the purposes of this research, walkable proximity is considered to be an area within 10 min walking distance of home.

Rather than conceiving neighbourhood and neighbourhood liveability on the basis of particular inherent physical qualities in the environment, a second conceptual approach views them as a behaviour-related function of the interaction of neighbourhood and person-based characteristics (Anderson, Carter, & Lowe, 1999). Everyday household activities influence the perceived dimension of the neighbourhood: for example, how far people are willing to walk to public transport, banks, health facilities, shops and recreational facilities. This suggests that neighbourhoods are identifiable through the link between their residential function and their non-residential uses and how this linkage draws and encourages activity. Neighbourhood behavioural and use patterns may extend into other neighbourhoods as people function in different social networks, at different scales, across different times and spaces, and thus as a result may look for different things than those that exist within their home area (defined as an area of 5–10 min walk) (Kearns & Parkinson, 2001). For some, time-geography of their neighbourhood is delimited across a wider region (Kearns & Parkinson, 2001).

1.3. Out-of-home mobility

Out-of-home mobility has been positively correlated to well-being (Ziegler & Schwanen, 2011) and is often a pre-requisite for commercial, cultural and social activities (Alsnih & Hensher, 2003; Shoval et al., 2011). While, engagement and use of outdoor environments have various benefits for older people through participation in physical activity, exposure to outdoor elements, and social interaction (Sugiyama & Ward Thompson, 2007), research has shown that older people spend most of their time at home with estimates of around 19.5 h on average per day (Brasche & Bischof, 2005; Moss & Lawton, 1982). Mobility, broadly defined as the ability to move oneself by, for example, walking or transport (Webber, Porter, & Menec, 2010), allows older people the opportunity to engage and use environments for everyday activities outside the home (Ziegler & Schwanen, 2011). The most common forms of mobility among older people are walking and driving (Schwanen & Ziegler, 2011).

Key correlates of the decision to walk include local availability and design of amenities including an accessible, time efficient, safe and comfortable transport network of public transport nodes,