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[Hu, Xin, Xia, Bo, Skitmore, Martin, Buys, Laurie, & Zuo, Jian](#) (2017)

Retirement villages in Australia: a literature review.
Pacific Rim Property Research Journal, 23(1), pp. 101-122.

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<https://doi.org/10.1080/14445921.2017.1298949>

Retirement villages in Australia: A literature review

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Retirement villages in Australia: A literature review

Abstract

With the increasing growth in the ageing population of Australia, providing older adults with suitable housing has become a significant focus of policy and practice. Retirement villages are a type of housing that delivers specialized accommodation for older people. Although previous research focused on a variety of topics concerning Australian retirement villages, a systemic overview of the development of the industry is still lacking. Thus, the purpose of this paper is to deliver an overview of its development. Considering the scarcity of data regarding the industry, secondary data collected from various sources are analysed to present the whole picture. It is found that, although the industry has grown gradually in past decades, it is currently still in a formative stage. Its development is confronted with various issues and challenges including affordability, inadequacy of social and physical environment settings, low penetration level, and challenges from the unique requirements of aging baby boomers, technological applications and sustainability, and the lack of policy support. This paper provides a platform for researchers and industry stakeholders to plan for the future development and growth of this sector.

Keywords: Retirement village industry; Overview; Ageing population; Australia

Introduction

People aged 65 and older comprise the fastest growing age group in Australia (Australian Bureau of Statistics, 2013a). During 1993~2013, the proportion of this 65+ group increased from 11.6 per cent to 14.4 per cent due to declining fertility and mortality rates (Australian Bureau of Statistics, 2013b). With the first “baby boomers” having turned 65 years old in 2011, this proportion is projected to increase even more rapidly in the future.

This fast-growing population has a widespread and profound impact on the housing services in Australia (Faulkner, 2007; Kendig & Gardner, 1997). Currently, there are multiple housing options for older Australians, ranging from private dwellings to residential aged care facilities (Australian Institute of Health and Welfare, 2007). For some older adults, a retirement village is a viable living arrangement in old age (Buys et al., 2006; Gardner et al., 2005). Living in retirement villages can benefit residents in several ways, such as enhancing life quality, promoting independence and encouraging social interaction (Gardner et al., 2005). Retirement villages also reduce the cost of publicly funded health care services (Grant Thornton, 2014). In 2008, there were 1,756 retirement villages distributed across Australia containing 145,000~150,000 residents (Jones Lang LaSalle, 2008). In 2013, the number of retirement villages increased to 2,106, accommodating more than 177,000 older people (Retirement Living Council, 2013a, b).

The Australian retirement village industry has achieved gradual growth over the past decades, with previous research focusing on resident relocation, living experience and the village living environment (Buys et al., 2006; Buys, 2000; Xia et al., 2015). However, the majority of these studies are limited to a specific focus and a systematic overview of the development

of the Australian retirement village industry is still lacking. In response, this paper presents an overview with the aim of not only providing both academic and industry stakeholders with an understanding of the sector but, more importantly, guiding its future development and paving the way for future studies. To achieve this, the paper analyses available the retirement village literature and collected secondary data from various recourses to explore what is known of Australian retirement villages, the current development of the Australian retirement village industry, and the issues and challenges of the sector's future development in Australia.

Research Method

This study focuses on retirement villages, a specific living arrangement operated and managed under the Retirement Village Acts and Regulations of each state/territory in Australia, which can be owned and operated by both for-profit and not-for-profit organizations. Retirement villages encompass different tenure types such as leasehold, freehold, loan and/or license, and rental, and can be co-located with hostels and/or nursing homes; however, this study does not distinguish between such differences due to the lack of data at this stage.

The scarcity of data relating to the Australian retirement village industry has hindered the understanding of the whole picture of its development. Secondary data provides an acceptable and useful way of deducing conclusions where there are missing data (Wang et al., 1992). This involves a research method for the analysis of data that has previously been collected and tabulated by other sources, such as data collected from government agencies and publicly available third parties (Bhattacharjee, 2012). In view of this, the data scarcity issue is addressed here through the collection and analysis of extant secondary data related to the Australian retirement village industry.

Secondary data analysis involves data finding and data analysis. In doing this, secondary data regarding retirement villages were firstly collected from a wide range of sources including Australian government websites (such as *Australian Bureau of Statistics*, *Australian Institute of Health and Welfare*, and *Australian Productivity Commission*), websites of various national organizations and institutions (such as *Retirement Living Council*, *Australian Housing and Urban Research Institute*, *Jones Lang LaSalle* and *McCrindle*), websites of leading Australian retirement village developers (such as *AVEO Live Well* and *Lend Lease*), professional services firms (such as *Gadens*, *Grant Thornton* and *PwC Australia*), influential research databases (such as *Scopus* and *Web of Science*), conference proceedings and reference textbooks. The keywords adopted in the search not only include “retirement village(s)” but also some other terms used to describe “retirement village(s)” in Australia in some situations, including “independent living unit(s)/villas”, “serviced unit(s)/apartment(s)”, “lifestyle village(s)”, “residential park”, “self-care unit(s)”, “independent living village(s)” and “retirement community/communities” (Howe et al., 2013; Miskovski et al., 2015). This was followed by both qualitative and quantitative analysis of the collected data. Specifically, it involved reviewing and summarizing previous literature findings, identifying and calculating representative indicators to describe the development of the industry, comparing and explaining different phenomena and findings, and specifying their implications for the sector’s future development. In this way, a whole picture of the development of the Australian retirement village industry eventually emerged.

What we know about retirement villages in Australia from the literature

Definition and characteristics of a retirement village

Terms utilized to describe “retirement village” vary around the world, which may result in confusion (Howe et al., 2013). For instance, the term adopted in Australia and New Zealand is usually linked to a “continuing care retirement community” or “independent living facilities” in America and “sheltered housing” in the UK. Given the usage of different terms as well as their different utilization background, it is hard to provide a generally applicable definition. This difficulty is further aggravated by the wide variation of services and facilities provided in different villages (Cheek et al., 2007).

Despite this, a retirement village can generally be depicted as an older people-based community that provides a variety of accommodation, services and facilities to meet their unique requirements. Retirement villages are considered a component of residential real estate rather than an aged care facility (U’Ren, 2013). Their characteristics comprise

- *Independent living.* The importance of independent living is highlighted by residents because of its close association with their well-being.
- *Institutionalization.* A retirement village is an institution and needs rules, regulations, programs and staff to govern its residents’ daily life (Stein & Morse, 1994; McDonald, 1996). In addition, the physical environment of retirement villages should be designed to match the unique competencies of its residents (Nathan et al., 2014).
- *An age-built environment.* Communal facilities, services and activities need to be provided to match the unique competencies of older adults.

Different kinds of retirement villages are available to potential residents with different socio-economic characteristics, such as resort style, modest and affordable villages (Jones et al., 2010). Resort style villages usually provide a more extensive range of facilities and service. Retirement villages can also be divided into those for-profit and those not-for-profit. For-profit villages are resident funded, with residents paying for village living costs such as the

entry contribution and on-going cost (Bridge et al., 2011). Not-for-profit villages are owned and operated by not-for-profit organizations such as churches and charitable organizations. Compared with residents living in for-profit villages, the average age of residents living in not-for-profit villages is older (Towart, 2013a).

Relocation

Living in a retirement village is becoming increasingly popular with young-old adults (55 to 64 years) having sufficient financial resources, poor physical health and poor neighbourhood cohesion (Crisp et al., 2013a). Former home owners occupy a higher proportion than non-home owners (Gardner, 1994). This may be because moving into a retirement village usually requires older adults to sell their former residence to pay for the village living cost such as the entry contribution (McCullagh, 2014). In addition, young retirees are more open to village living and attracted by the leisure lifestyle of the villages while older retirees expect to obtain health care services from the retirement village environment (Crips et al., 2013b).

The residents' relocation decision-process is complicated. Though the decision to move is most likely made independently by potential residents, their adult children also play a significant role in helping to choose a facility (Knight & Buys, 2003). It is suggested that having control over the relocation decision process contributes positively to the post-location adjustment of the residents (Knight & Buys, 2003).

A number of factors influence the decision to move to a retirement village. According to Crisp et al. (2013b), factors that encourage relocation concern the provision of outdoor living areas, support for independent living and access to living and medical facilities. By adopting a push-pull framework, Stimson & McCrea (2004) argue that the push factors that prompt

older people to move from their own home primarily relate to lifestyle changes, home maintenance, social isolation, and health and mobility. Pull factors, on the other hand, relate to the built environment and affordability, the locational attributes of the village and the desire to maintain an existing lifestyle. The investigation conducted by Kupke (2001) suggests that important push factors are composed of the desire to plan ahead, dwelling size and health issues; while important pull factors include safety, companionship and the desire to be near family. Of these, health-related factors are mentioned frequently. One reason for this is that the likelihood of suffering from physical, psychological and mental disabilities increases with age, and residents believe the supportive living environment of a retirement village provides effective support (Buys, 2000; Jones et al., 2010). To attract potential residents, around 32% of retirement villages co-locate with residential aged care facilities to provide health care services to residents based on the concept of the “continuum of care” (Jones et al., 2008; Jones et al., 2010; Towart, 2013b). When the village environment does not meet the needs of the residents, they choose to move to acute care systems such as aged care facilities (Cheek et al., 2005). The reasons contributing to this process include a health-related crisis, the residents’ doubting their ability to cope in retirement villages, more and different service requirements, and the desire to retain independence (Cheek et al., 2007).

Retirement village living experience

Life quality of residents

The majority of older people living in retirement villages have a high quality of life (Gardner et al., 2005; Kennedy & Coates, 2008). The research findings of Ferris & Bramston (1994) indicate that village residents are more satisfied than older adults living in nursing homes, hostels and family homes. The main reason for this appears to be the supportive living environment, which refers to aspects such as access to facilities and services, social

connections and participation and a senior-oriented physical environment. More specifically, first, a range of facilities and services are available for residents to benefit their daily life, such as community centres, libraries, hairdressers, care services, transport and maintenance services (Xia et al., 2014a). Second, residents prefer having a socially connected environment where they can make contact with friends (within and outside the village), neighbours and family members (Buys et al., 2006; Buys, 2001). This kind of socially connected environment is helpful in reducing the residents' sense of isolation and loneliness. Moreover, the physical environment of retirement villages is constructed with consideration given to supporting mobility (e.g., the proximity to local service providers), ease of maintenance, senior-friendly design and a high quality indoor environment (Zuo et al., 2014). This is a key aspect to meet residents' requirements in terms of security, privacy, independence and social interaction (Nathan et al., 2013).

However, it should be noted that not all village residents are satisfied with the village life. According to Grand et al. (2005), in some villages, the dissatisfaction of village residents refers to "*the locality with respect to familiar facilities and social networks, personal autonomy in the decision to move, the nature of the village environment, and the financial and contract conditions of the village*". In addition, some residents are dissatisfied with the daily operation and management of retirement villages (Retirement Living Council, 2014a).

Social connection and participation

Social connection and participation are important components of the village social life and include such aspects as the establishment of friendships and neighbourhood relationships, contact with family members and participation in activities. Friendship is the organic component of the social network in retirement villages, and the majority of village residents

are satisfied with their contacts with friends (Buys, 2001). Maintaining contacts with both village and community friends can benefit residents in obtaining acceptance, companionship and emotional support (Legge, 1984; Buys, 2001). In addition, neighbourhood relationships in villages means that goods and services are exchanged across gender and marital status (McDonald, 1996). This relationship can help develop an informal alarm system that can be used for social support between neighbourhoods (McDonald, 1996). Nevertheless, a close neighbourhood relationship may lead to unexpected problems, such as a heavy dependence on some neighbours (McDonald, 1996). Furthermore, family visits to residents provide important informal caregiving. Nevertheless, family contact with residents is relatively less than that of older adults residing in the community, and village residents tend to receive less help from their family members (Buys et al., 2006).

Village developers/operators also provide a variety of activities for residents to enrich their daily lives, and it is known that participation in activities can improve physical functioning and reduce the residents' rate of falling (Lord et al., 2003). Although some villages have reported a high rate of participation in activities, particularly females and widows needing more social involvement, not all residents are active (Grant Thornton, 2014; McDonald, 1996; Nathan et al, 2014a). Nevertheless, compared with their community-dwelling peers, village residents still report a greater amount of participation in leisure activities (Buys & Miller, 2004, 2007). The environmental factors of retirement villages and their surroundings profoundly affect resident participation in village activities (Nathan et al., 2013). Some strategies have been suggested to promote participation in activities, such as the provision of a positive social environment, the provision of services and facilities and a wider neighbourhood, the provision of a secure village environment and the provision of an appropriate built environment (Nathan et al., 2013, 2014b, 2014c).

Services and facilities

The provision of services and facilities in retirement villages is important in promoting active ageing and what is provided is an important difference between villages (McCullagh, 2014; Nathan et al., 2013). For the residents, the price of using village services and facilities is cheaper than outside due to the density of customers in one site (McCullagh, 2014).

A variety of services and facilities are available to residents to facilitate their daily life. First, services can be provided directly by village developers/operators, or contracted out to a third party (Productivity Commission, 2015). The services provided include food, room, maintenance, security guard and transport services, and visiting medical practitioners. The quality of these services has a crucial influence on the satisfaction of residents (Kennedy & Coates, 2008). Compared with the services delivered in the community, the services in retirement villages are provided in a more flexible and cost effective way (Productivity Commission, 2015). In addition, the most provided on-site amenities are community centres, libraries, barbeque facilities, hairdressers and poolrooms (Xia et al., 2014a). Usually, large for-profit retirement villages provide more facilities than small not-for-profit ones (Xia et al., 2014a). Nevertheless, it should be noted that although a variety of services and facilities are available to residents, they are not equally desired and used (Nathan et al., 2013; Miller & Buys, 2007). According to Stimson et al. (2002), residents use more services and facilities that are associated with their social interactions.

Village built environment

The built environment of retirement villages is a crucial component of the village environment. The village building environment, such as the individual residence, internal and

external common space, overall village design, security in design, the product mix and the location, profoundly impacts on the residents' life satisfaction (Kennedy & Coates, 2008). For instance, it is suggested that the village location should be integrated into the surrounding communities to ensure residents' life satisfaction by encouraging a healthy lifecycle and active ageing (Kendig et al., 2014). In addition, the village built environment also impacts on the residents' participation in activities, such as in having a suitable pedestrian infrastructure or a village location that is positively based on family members and friends, and the aesthetic design of a village with few physical barriers (Nathan et al., 2013, 2014b, 2014c). In recent years, due to the positive impact of sustainable development, a number of green practices have also been used in the development and operation of retirement villages to provide a sustainable village environment while still aiming to provide an affordable housing option (Xia et al., 2015; Zuo et al., 2014).

Debates on retirement village living

Despite the high quality of life of residents, there are debates regarding the impact of retirement village living. First, the village environment may become quite restrictive due to its social norms and regulations, as conforming to may create stress for residents, restrict their freedom and choice, and negatively impact on their privacy and autonomy (Faulkner, 2001; Stein & Morse, 1994). Additionally, village residents are older adults with similar backgrounds. As a result, village living may promote social isolation, aged ghettoism, social class homogeneity and age-conscious identities (Bohle et al., 2014; Gracia et al., 2010; Faulkner, 2001; McDonald, 1986). Furthermore, the affordability of village living has been criticized, particularly when residents are not affluent and have a lower capacity to pay (Walker & McNamara, 2013). This makes the retirement village sector focus more on older adults with assets (McNelis & Herbert, 2003). In short, retirement village living may be a

positive accommodation choice for some older people, but it may not suit everyone as it is not an antidote for an ageing society.

Current development of the Australian retirement village industry

A brief history of the retirement village industry in Australia

The retirement village industry is becoming increasingly marketized in many parts of the industrialized world such as the UK, America, New Zealand and Australia. As a viable accommodation option for older adults, retirement villages have been evolving for a long time in Australia. They can be traced back to the organized retirement living by churches and charitable organizations around the 1800s in providing housing and care to older Australians (Towart, 2005). Before the 1970s, self-care/independent living units were mainly provided by churches and charities through Commonwealth government capital funding subsidies under the Aged Persons Homes Act 1954. The intention of the Aged Persons Homes Act 1954 was to provide affordable, independent housing for lower-income older adults (Jones et al., 2008). However, the Aged Persons Homes Act 1954 was amended by the Aged or Disabled Persons Homes Act 1974, and the Commonwealth government capital funding subsidies were phased out. The gap resulting from the withdrawal of the Commonwealth government capital funding subsidies was filled by increasingly residential-funded self-care/independent units operated by both not-for-profit and for-profit organizations (McGovern & Baltins, 2002). After the 1970s, the fast growing number of retirement villages became the genesis of the Australian retirement village industry. Retirement villages, especially those owned by the private sector, expanded their range and quality of accommodation, facilities and services to meet the requirements of older people. In addition, retirement village developers/operators

also gradually highlighted the living philosophy of retirement villages such as security, social connection and independence instead of simply a form of residential property.

The development of the Australian retirement village sector has been promoted by related legislation. The early development of the sector was promoted by the Aged Persons Homes Act 1954 due to subsidies allocated to the voluntary organizations to provide independent living units to residents. In the 1970s, the financial/legal aspects of retirement villages were operated within the National Companies and Security Legislation to protect the residents' investment (McNelis & Herbert, 2003). Nevertheless, this arrangement was unable to deal with many aspects of retirement villages as residents not only invested but also moved in and out of villages. From the early 1980s, due to the popularity of consumerism in the 1970s, local governments started to introduce state¹-based legislation to protect the rights and interests of village residents. Commencing with VIC in 1986, each state enacted specific retirement village related legislations to guide the development of the sector (McNelis & Herbert, 2003). The legislation currently being used in different states are summarized in Table 1. For instance, in QLD, the *Retirement Villages Act 1999* and *Retirement Villages Regulations 2010* were enacted to regulate its development. That there are different legal structures is due to the slow historical commercialization of the Australian retirement village sector and developments in tax and stamp duty. In general, the legislation covers the diverse aspects of village development and operation, such as pre-entry requirements, information disclosure and the resolution of complaints and disputes (McNelis & Herbert, 2003). Retirement village legislation is reviewed regularly (Gadens, 2014). For instance, the Retirement Village Regulations 1987 and 2002 in SA have ceased and the Retirement Village

¹ Australia is made up of six States - New South Wales (NSW), South Australia (SA), Victoria (VIC), Queensland (QLD), Western Australia (WA) and Tasmania (TAS) - and two main Territories - Northern Territory (NT) and the Australian Capital Territory (ACT). For brevity, all are referred to as States here.

Regulations 2006 are currently being used (the latest version being 1.7.2015). In the ACT, the Retirement Village Act 2012 replaced the Fair Trading (Retirement Villages Industry) Code of Practice 1999 in 2013. Differences can be found between these state-based legislative frameworks (Towart, 2005). For example, most states stress the independent living of village residents, while hostel units, which offer personal care to residents, are regarded as a component of retirement villages in WA and NT. These differences cause several difficulties for village developers and operators as it requires more work in familiarizing different acts and regulations and understanding different the legal mechanisms affecting the running of retirement villages, which ultimately hinders trans-state businesses (Towart, 2005).

Table 1 near here

Profile of retirement village residents

Figure 1 shows the trend in Australian retirement village resident numbers since the early 1990s and the forecast numbers for 2023, when village residents are expected to reach 320,000~350,000 nationwide, mainly due to the quickly growing number of older people and the wider acceptance of the retirement village lifestyle (Jones Lang LaSalle, 2008).

Figure 1 near here

However, the distribution is uneven, which is partly due to the unequal distribution of older people in Australia. As Figure 2 indicates, the number of retirement village residents in NSW, QLD and VIC is much larger than in other states. Combining this with the estimated population data from the Australian Bureau of Statistics (2014), the estimated proportion of older people living in retirement villages can be obtained (see Table 2), where it can be seen

that WA and QLD have a higher proportion, reaching more than 7 per cent, followed by SA (6.5%). Only approximately 3.1 per cent of older people reside in retirement villages in TAS. Furthermore, Perth has the highest proportion of the people 65+ years living in retirement villages (7.2%) of the main cities of Australia, followed by Brisbane (6.6%) and Adelaide (6.1%). In Melbourne and Sydney, the figure is only around 4 per cent (see Figure 3).

Figure 2 near here

Table 2 near here

Figure 3 near here

Interestingly, the results shown in Table 2 and Figure 3 indicate that the penetration levels of all the capital cities are less than their corresponding states. One possible explanation is that young people born outside capital cities are more likely to be attracted by urban life in capital cities. This leaves their older parents alone and in need of more age-related services and support than those residing in capital cities. Given that their services and support requirements may be difficult to satisfy only through their living community, as areas outside the capital cities are usually of infrastructure erosion and services inaccessibility (Davis & Bartlett, 2008), a more supportive living environment such as a retirement village is needed to compensate for the lack of support from either family members or the community. Similarly, as older adults living in capital cities usually have more chances for accessing a variety of living arrangements, age-related support and services, their demands on the supportive living environment of retirement villages are relatively less.

Profile of retirement villages

Figure 4 shows the increasing number of retirement villages in Australia over the years. It can be seen that the growth of retirement village has been less dramatic than in the past decades. The predicted number of retirement villages will reach around 3,000 in 2023.

Figure 4 near here

The distribution of retirement villages is shown in Figure 5. NSW has far more retirement villages (680 in the year 2013) than other states. A possible reason for this is that the number of older adults living in NSW is more than other states (Australian Bureau of Statistics, 2014). In addition, older people living in the southeast of Australia, including NSW, are relatively wealthier. Moreover, the temperate climate in the north of NSW is more suitable for retirement living (Roberts, 1997).

Figure 5 near here

Independent living units are the most common form of retirement village dwellings (Productivity Commission, 2015). NSW has the largest number (34,538) of independent living units, followed by QLD and VIC (see Figure 6). On the whole, for-profit organizations provide 57% of independent living units, slightly more than not-for-profit organizations (Retirement Living Council, 2013b). At the state level, the for-profit units dominate the retirement village market in VIC, QLD and SA, with the number of for-profit units being 17,109 (74.8%), 16,386 (71.5%) and 8,103 (53.9%) respectively. The not-for-profit units are more prevalent in NSW, ACT, TAS and WA.

Figure 6 near here

Based on the information provided in Figures 2, 5 and 6, the average size of retirement village in each state can be determined (see Table 3). It can be seen that the average size of a retirement village in QLD is the largest (70 independent living units and 146 residents). QLD's huge potential market of retirement villages is one of the main factors that determine its larger village size (Towart, 2005). This is because, first, QLD has a relatively high percentage of the 65+ group (around 13.6 per cent in 2013) and a higher penetration rate of the village living (7.5%). In addition, considerable public investment is available in QLD to construct both private and public infrastructures to support the growth of the population, particularly in the Sunshine Coast area (Jones Lang LaSalle, 2008). This huge demand can also be evidenced from Jones Lang LaSalle (2008)'s prediction that QLD has the largest number (10) of potential major retirement village places in Australia. In SA, a typical retirement village accommodates around 41 residents and has 34 independent living units - a reflection of SA's decreased potential market for retirement villages. SA also has less older adults than QLD and NSW. The reduced demand for retirement villages in SA is reflected in Jones Lang LaSalle's (2008) prediction that SA has the smallest number (3) of potential major retirement village places in Australia. In addition, unlike retirement villages in other states, retirement villages in SA do not have to be contiguous, which also allows for the development of the relatively small size of retirement villages there.

Table 3 near here

Financial cost and tenure arrangement

The retirement village fee structure is complex and living costs vary significantly between different villages, which may create uncertainty and confusion for residents (Productivity

Commission, 2015). Village developers/operators determine their fee arrangements mainly based on the village characteristics (e.g. local property value, tenure, provided services and amenities, unit size and design) (McGovern & Baltins, 2002; Towart, 2005). Usually, retirement villages have a three-tiered payment structure, involving

- *Entry contribution.* This is a lump-sum contribution paid at the time of entry to the village, in forms of a payment, loan, donation or some combination of these (Finn et al., 2011). This kind of cost differs considerably across regions. A recent investigation shows that the average price of a two-bedroom independent living unit was \$375,000 in Australia with NSW having the highest price (\$411,000) and SA the lowest price (\$308,000) (Retirement Living Council, 2014). Typically, the entry contribution of a for-profit village is higher than that for a not-for-profit village, being around 80 per cent of the median price for comparable dwellings in the locality (Eardley, 2000; McCullagh, 2014). The majority of residents finance their entry contribution from the sale of their previous home (Stimson et al., 2002; McCullagh, 2014).
- *Ongoing costs.* This refers to day-to-day retirement village running costs (Finn et al., 2011). The Retirement Living Council (2014) indicated that the nationwide average monthly service fee is \$393, with NSW being the highest (\$433) and QLD being the lowest (\$363). The village operators do not make profits from the on-going payment, which is limited to cost recovery (McCullagh, 2014).
- *Deferred management fee.* This usually takes the form of a deduction from the resale price or withheld percentage of the entry contribution plus a percentage of the capital gain when residents move out or pass away (Finn et al., 2011). It is considered as an exchange for a discount of entry contribution (Craddock & Blake, 2012b). The deferred management fee is of significance for residents as the common calculation formula is up to 30 per cent of the resale value (Finn et al., 2011). The deferred management fee is one

of the main sources of the village operators' profit (McCullagh, 2014). This fee arrangement is complex and varies between different villages and residents are often unsure of the details involved (Eardley, 2000).

The cost of living in retirement villages located in the southeast coastal areas is relatively higher than other regions, which is mainly due to the higher land acquisition and daily consumption costs of these areas.

Village developers can choose from several different tenure types, such as leasehold, freehold, loan/license and rental (Craddock & Blake, 2012b; McGovern & Baltins, 2002). Of these, leasehold (used by around 30 per cent of villages) and loan/license (used by 50 to 60 per cent of villages) are the most two popular tenure types as village developers/operators can retain the ownership of the land, providing various benefits such as the flexibility of site re-development (Craddock & Blake, 2012b; Productivity Commission, 2015). Different tenure types affect residents in different ways. For instance, although freehold provides the highest level of security, as the owner of the freehold title cannot be evicted, residents are responsible for the payment of statutory and utility charges, and the state stamp duties and transfer fees resulting from the purchase transaction (Craddock & Blake, 2012a). In addition, loan/license and freehold ensure residents can share capital gains, which may improve the residents' financial security in old age (McGovern & Baltins, 2002). This gives residents more financial resources when choosing their future living arrangements after moving out of their villages (e.g., moving to aged care facilities). Loan/licensing and lease holding ask residents to pay the deferred management fee when they leave their villages, which may negatively impact on their financial capability (McGovern & Baltins, 2002). It should be noted that some residents fail to appreciate these influences, which can result in confusion or even litigation (Craddock

& Blake, 2012b). This issue is further exacerbated by factors such as difficulties in accessing tenure information, understating state-based legislative framework and the lack of a consistent and preferred type of interstate tenure (Craddock & Blake, 2012a; Craddock & Blake, 2012b).

Issues and challenges: future development of the Australian retirement village industry

In spite of the increasing popularity of retirement village living in recent decades, the Australian retirement village industry is still in its infancy and its development is confronted with several issues and challenges in terms of affordability, social environment settings, physical environment settings, penetration levels and the likely effects of aging baby boomers, technology applications, sustainability and lack of policy support.

- **Affordability.** Although the majority of residents feel financially secure and believe they have made a good financial decision, village living costs are still a concern for some residents especially for non-homeowners and pensioners living in for-profit villages (Davy et al., 2010; Gardner et al., 2005; McCrindle, 2013). The affordability issue is a concern for many potential residents given that moving into a retirement village involves a significant financial investment such as the high entry contribution and the possibility of rising ongoing costs (Crisp et al., 2013b; Gardner et al., 2005; Walker & McNamara, 2013). This is viewed as one of the main hindrances to potential resident relocation (Judd et al., 2010; Judd et al., 2014). A recent investigation found that 41 percent of residents regard the entry contribution and ongoing costs to be “very expensive” (McCrindle, 2011). Although some charitable organisations provide subsidised rental units for low-income older people, the waiting list is extensive (Judd et al., 2003). In addition, although baby boomers generally have more disposable income than their predecessors, the affordability

issue may also be a problem given their limited financial management abilities and limited financial resources in retirement (Faulkner, 2007; Humpel et al., 2010; Kendig et al., 2013; Ozanne, 2009; O'Loughlin et al., 2010; Quine & Carter, 2006; Snoke et al., 2011). Thus, there is an increasing tendency to offer a range of financial packages (e.g., a smaller entry contribution but with a larger deferred management fee) to suit the different financial situations of potential residents (McGovern & Earl, 2002).

- ***Social environment settings.*** Despite most residents having a positive life experience, more than 10 per cent of residents report that their quality of social life has declined since their relocation (McCrinkle, 2011). One possible reason is that the facilities in some villages are insufficiently tailored to meet the residents' requirements. This results in the utilization of on-site facilities by only 20% of residents (Miller & Buys, 2007). Nathan et al. (2013) reveal that "*access to village recreational facilities did not equate to residents using such facilities*". Another reason is that the variety of services provided in retirement villages may create an over-dependency for residents and this service-rich environment harms their autonomy (Gardner et al., 2005). Moreover, some residents are classified as low participators and non-participators of the social benefits available (McDonald, 1996). Some residents are even confronted with social connection issues. For instance, they may have a very small number of contacts with friends (both outside and inside of their villages), and that it is difficult for residents to establish close friendships in retirement villages (Buys, 2001; McDonald, 1996). Other issues, such as dissatisfaction with village operators, incomplete knowledge of contract conditions, and the possibility of reduced independence, privacy and security are also mentioned by village residents (Crisp et al., 2013b; Retirement Living Council, 2013a).
- ***Physical environment settings.*** Although the majority of village residents feel satisfied with the village physical environment, some adverse characteristics of the village physical

environment can lead to resident dissatisfaction. For instance, the space designs of retirement villages may reinforce “the historical legacies of separation from the community”, which results in residents’ social isolation (Petersen & Warburton, 2012). In addition, some villages may be too small or too big for residents. For villages with limited space, potential residents are hesitant when considering their relocation, as limited space means the proximity of individual dwellings, which negatively affects the residents’ privacy (Crisp et al., 2013b). Similarly, a too-big village living space can also trouble residents due to the higher maintenance costs involved and difficulties in maintaining their family home (Kennedy & Coates, 2008). Other issues regarding the village’s physical environment include quality problems of individual residences (such as the cracks in the structure), lack of access, and inadequate healthy and safety design, etc. (Kennedy & Coates, 2008). This situation may be more serious in independent living units that were developed years ago. A national survey showed that thirty-four per cent of independent living units in Australia require upgrading due to their level deterioration failing to meet the residents’ expectations (McNelis, 2004; McNelis, 2007).

- ***Penetration level.*** Compared with other industrialized countries, especially the U.S., the penetration level of the Australian retirement village industry is low. Around 7 per cent of older adults live in retirement villages in the US in 2006 (Omoto & Aldrich, 2006), while, in 2008, only 5.25 per cent of 65+ people lived in retirement villages in Australia - increasing to only 5.32 per cent in 2013 (Jones Lang LaSalle, 2008; Retirement Living Council, 2013a). Apparently, retirement village living has not attracted enough potential residents in Australia. Most older Australians prefer living in their own home (ageing-in-place) which means more independence and autonomy, less expense and easier access to family members, friends and communities. For most older adults, residing in retirement villages is a result of external environmental pressures, particularly health issues, as

evidenced by the average entry age of residents being very old (Crisp et al., 2013a, 2013b; Retirement Living Council, 2013a). According to the PwC Australia (2014), the average age of residents entering retirement villages is 74 years. To increase the penetration level, it is essential to address potential residents' concerns about the village life and meet their diverse daily life needs (Hu et al., 2015a).

- ***Ageing baby boomers.*** Australian baby boomers have unique housing preferences, and it is suggested that the future development of retirement villages should take particular account of this cohort (Kendig et al., 2014; Pinnegar et al., 2012). For instance, they prefer ageing-in-place to maintaining their current lifestyle as they age (Quine & Carter, 2006). In addition, they expect to live independently, still be active members of an intergenerational community and retain their social connections (Quine & Carter, 2006). Moreover, they have expectations of high quality housing and neighbourhoods, and prefer having access to facilities and services (Faulkner, 2007). These preferences pose challenges to village developers/operators in forming a suitable village environment. For instance, village developers/operators should provide suitable on-site services to facilitate baby boomers' independent living. This means that the baby boomer generation is changing the development model of Australian retirement villages (Rogers, 2014).
- ***Technological application.*** The applications of new technologies (e.g. touch screens, remote and smart phones, robotics, etc.) in facilitating the daily life of older adults are increasing (Demiris et al., 2004). It is suggested that these technologies can also be used in retirement villages to benefit village residents. For instance, the widely used assistance technology of emergency call systems in Australian retirement villages enhances resident safety. Nevertheless, technology applications in villages have also been attracted attention. For example, investigations into a New Zealand retirement village indicate that the application of robotics may harm residents, result in privacy invasions and deprive

professionals' of the right to work (Broadbent et al., 2012). For future village development, village developers/operators are confronted with a set of issues regarding technology applications, such as whether technologies will be applied or not, what kinds of technologies will be used, and how to anticipate the negative effects of technology applications.

- ***Sustainability.*** The majority of residents living in both for-profit and not-for-profit villages are very conscious of their unsustainable resource consumption and expect their village physical environment to be sustainable (Barker et al., 2013; Xia et al., 2014b). In practice, some green practices have been incorporated into the development of retirement villages to provide residents with the sustainable living environment such as the innovative design of site and floor plans, adoption of efficient materials, optimization of window orientation, installation of water harvesting and recycling systems, application of water conservation fittings and appliances, and construction waste management (Zuo et al., 2014). The residents from for-profit villages agree to pay more to make their village more environmentally sustainable, while the village developers/operators and not-for-profit village residents are concerned with the additional costs of environmental sustainability (Barker et al., 2013; Xia et al., 2014b; Zuo et al., 2014). The development of future retirement villages should not only make the village environment green but also be affordable for the residents of both for-profit and not-for-profit villages. This can be achieved through the development of sustainable retirement villages where the residents' social, economic and environmental needs can be well satisfied (Hu et al., 2015b; Xia et al., 2015).
- ***The lack of policy support.*** The Australian retirement village sector is not a national industry priority or receiving direct and clear policy support (Davy, 2010; Property Council of Australia, 2015). One typical example is that the retirement village industry

faces barriers in respect of land use planning policies (Productivity Commission, 2015). Village developers have to compete with residential developers on the open market. Compared with residential developers, village developers need to invest more, as the village environment needs to be in balance with the needs of older people. This may lead to the high cost of living in retirement villages. Nevertheless, the majority of residents are either full pensioners (54%) or part pensioners (34%) who have limited financial resources (Towart, 2013a). It is suggested that policies supporting the development of the Australian retirement village sector should be enacted by the Australian government to support its development.

Conclusions

The Australian retirement village industry has experienced gradual growth in past decades, and is predicted to continue to grow in the future. In spite of the projected growth of the sector, it is still questionable whether it will continue to expand due to such matters as the uncertainty of baby boomers' attitudes towards village life (Beer & Faulkner, 2009). Currently, the sector is still very much in its infancy with a range of issues and acute challenges.

This paper presents an overview of the Australian retirement village industry. It is found that the number of village residents and retirement villages are increasing steadily. NSW has the largest number of residents and villages, and QLD and Perth have the largest resident proportions at the state and city levels respectively. Nationally, for-profit organizations provide slightly more independent living units than not-for-profit organizations. For-profit units dominate the retirement village market in VIC, QLD and SA. Interestingly, the village size in QLD is larger than in other states, and SA is the smallest. Village living costs are

relatively higher in southeast coastal areas, and two most popular tenure and contract arrangement are leasehold and loan/license. Additionally, the barriers hindering the development of the retirement village industry are the high resident costs involved, inadequacy of the village social and physical environment settings, low penetration level, difficulties of meeting the unique requirements of aging baby boomers, difficulties and issues in technology applications, sustainability challenges and lack of policy support.

The findings of this study provide both researchers and stakeholders with a useful reference to better understand this growing industry. The paper also paves the way for further studies, such as how to deal with the issues and challenges involved in the sustainable development of this sector. The study also has a number of limitations. First, only secondary industry data were collected and analysed because of the scarcity of primary data. In addition, the study mainly focuses on village residents, with minimal information regarding the operators. Differences at the state level are also not taken into consideration (e.g., the influence of different tenure types in different states). All these prevent a comprehensive overview of the development of this sector. However, the study mainly uses reports that are available to the public and thus those that may likely provide additional information but are unavailable to the public were not covered. The retirement village data are collected from credible sources, however, and can therefore depict a relatively clear picture of the retirement industry in Australia.

References

Australian Bureau of Statistics (1999). Older People, Australia: A Social Report. Chapter One: Population and Cultural Diversity. Retrieved December 2014, from <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4109.0>

Australian Bureau of Statistics (2000). Year Book Australia. There's No Place Like Home.

Retrieved December 2014, from

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/featurearticlesbyCatalogue/A4D933C2065DF740CA2569DE00221C87?OpenDocument>

Australian Bureau of Statistics (2003). Australian Social Trends. Population characteristics:

People in institutional settings. Retrieved December 2014, from

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/2f762f95845417aeca25706c00834efa/9c1dc93dd9a137daca2570eb0082e463!OpenDocument>

Australian Bureau of Statistics (2013a). Over 65s growing fastest. Retrieved December 2014,

from

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/3101.0Media%20Release1Jun%202013?opendocument&tabname=Summary&prodno=3101.0&issue=Jun%202013&num=&view=>

Australian Bureau of Statistics (2013b). Feature Article 1: Population by age and sex,

Australia, states and territories. Retrieved December 2014, from

<http://www.abs.gov.au/ausstats/abs@.nsf/Products/3101.0~Jun+2013~Feature+Article~Population+by+Age+and+Sex,+Australia,+States+and+Territories+%28Feature+Article%29?OpenDocument>

Australian Bureau of Statistics (2013c). Reflecting a Nation: Stories from the 2011 Census,

Where and how do Australia's Older People Live. Retrieved December 2014, from

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2071.0main+features602012-2013>

Australian Bureau of Statistics (2014). 3101.0 - Australian Demographic Statistics, Sep 2013.

Retrieved December 2014, from

<http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Sep%202013?OpenDocument>

- Australian Institute of Health and Welfare (2007). *Older Australia at a glance: 4th edition*, Canberra. Retrieved December 2014, from <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=6442454209>
- Barker, J., Xia, B. & Zillante, G. (2013). Sustainable retirement living: what matters?. *Australasian Journal of Construction Economics and Building-Conference Series, 1* (1), 56-61.
- Beer, A. & Faulkner, D. (2009). 21st century housing careers and Australia's housing future. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_nrv2_final_report
- Bhattacharjee, A. (2012). *Social science research: principles, methods, and practices*, Florida, USA: Textbooks Collection.
- Boldy, D., Grenade, L., Lewin, G., Karol, E. & Burton, E. (2011). Older people's decisions regarding 'ageing in place': a western Australian case study. *Australasian Journal on Ageing, 30* (3), 136-142.
- Bridge, C., Davy, L., Judd, B., Flatau, P., Morris, A., & Phibbs, P. (2011). Age-specific housing and care for low to moderate income older people. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_70589_fr
- Broadbent, E., Tamagawa, R., Patience, A., Knock, B., Kerse, N., Day, K. & MacDonald, B.A. (2012). Attitudes towards health-care robots in a retirement village. *Australasian Journal on Ageing, 31* (2), 115-120.
- Buys, L., & Miller, E. (2004). *Very old, widowed and single men living alone: The effect of residence, retirement village vs. the community, on social interactions, friendships and loneliness*, The Social Change in the 21st Century Conference, October 2004.

- Buys, L., Miller, E. & Barnett, K. (2006). The personal, practical and policy implications of older Australians' residential choice: Impact of retirement village vs. community living on family and formal support. *Journal of Housing For the Elderly*, 20 (1-2): 31-46.
- Buys, L., & Miller, E. (2007). The physical, leisure and social activities of very old Australian men living in a retirement village and the community. *Geriatrics*, 25(2): 15-19.
- Buys, L. R. (2001). Life in a retirement village: implications for contact with community and village friends. *Gerontology*, 47 (1), 55-59.
- Buys, L. R. (2000). Care and support assistance provided in retirement villages: expectations vs reality. *Australasian Journal on Ageing*, 19 (3), 149-151.
- Bohle, P., Rawlings-Way, O., Finn, J., Ang, J., & Kennedy, D. J. (2014). Housing choice in retirement: community versus separation. *Housing Studies*, 29(1), 108-127.
- Cheek, J., Ballantyne, A., & Roder - Allen, G. (2005). Factors influencing the decision of older people living in independent units to enter the acute care system. *Journal of Clinical Nursing*, 14(s1): 24-33.
- Cheek, J., Ballantyne, A., Byers, L., & Quan, J. (2007). From retirement village to residential aged care: what older people and their families say. *Health & Social Care in the Community*, 15(1): 8-17.
- Craddock, L. & Blake, A. (2012a). *The impact of tenure type on the desire for retirement village living*, The 18th Annual Conference of the Pacific Rim Real Estate Society, January 2012, Adelaide, Australia.
- Craddock, L. M. & Blake, A. (2012b). Retirement villages: time for a change?. *Australia and New Zealand Property Journal*, 3 (8), 645-654.
- Crisp, D. A., Windsor, T. D., Anstey, K. J. and Butterworth, P. (2013a). Considering relocation to a retirement village: predictors from a community sample. *Australasian Journal on Ageing*, 32 (2), 97-102.

- Crisp, D. A., Windsor, T. D., Butterworth, P. & Anstey, K. J. (2013b). What are older adults seeking? Factors encouraging or discouraging retirement village living. *Australasian Journal on Ageing*, 32 (3), 163-170.
- Davis, S. & Bartlett, H. (2008). Review article: healthy ageing in rural Australia: issues and challenges, *Australasian Journal on Ageing*, 27 (2), 56-60.
- Davy, L., Bridge, C., Judd, B., Morris, A., & Phibbs, P. (2010). Age-specific housing for low to moderate-income older people. Australian Housing and Urban Research Institute. Retrieved September 2016, from https://www.ahuri.edu.au/__data/assets/pdf_file/0023/2885/AHURI_Positioning_Paper_No134_Age-specific-housing-for-low-to-moderate-income-older-people.pdf
- Demiris, G., Rantz, M. J., Aud, M. A., Marek, K. D., Tyrer, H. W., Skubic, M. & Hussam, A. A. (2004). Older adults' attitudes towards and perceptions of 'smart home' technologies: a pilot study". *Informatics for Health and Social Care*, 29 (2), 87-94.
- Eardley, T. (2000). Rent assistance policy for residents of retirement villages. *Australasian Journal on Ageing*, 19(3): 130-135.
- Faulkner, D. (2001). Linkages Among Housing Assistance, Residential (re) location and Use of Community Health and Social Care Among Old-old Adults: Shelter and Non-shelter Implications for Housing Policy Development. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_40005_fr1
- Faulkner, D. (2007). The older population and changing housing careers: Implications for housing provision. *Australasian Journal on Ageing*, 26 (4), 152-156.
- Ferris, C., & Bramston, P. (1994). Quality of life in the elderly: A contribution to its understanding. *Australian Journal on Ageing*, 13(3): 120-123.

- Finn, J., Mukhtar, V. Y., Kennedy, D. J., Kendig, H., Bohle, P. & Rawlings-Way, O. (2011). Financial planning for retirement village living: a qualitative exploration. *Journal of Housing For the Elderly*, 25 (2), 217-242.
- Gadens (2014). A guide to aged care and retirement villages in Australia. Retrieved November 2015, from <http://www.gadens.com/publications/Documents/A%20guide%20to%20Aged%20Care%20and%20Retirement%20Villages%20in%20Australia.pdf>
- Gardner, I. L., Browning, C. & Kendig, H. (2005). Accommodation options in later life: retirement village or community living?. *Australasian Journal on Ageing*, 24 (4), 188-195.
- Gardner, I. L. (1994). Why People Move to Retirement Villages: home owners and non - home owners. *Australian Journal on Ageing*, 13(1): 36-40.
- Gracia, N., Moyle, W., Oxlade, D., & Radford, K. (2010). Addressing loneliness in a retirement village community: A pilot test of a print-delivered intervention. *Australasian journal on ageing*, 29(4): 179-182.
- Grant Thornton. (2014). National overview of the retirement village sector. Retrieved March 2016, from http://www.grantthornton.com.au/globalassets/1.-member-firms/australian-website/industry/hac/pdfs/gtal_2014_hac_national-overview-of-the-retirement-village-sector.pdf
- Howe, A. L. (1992). Housing adjustments and preferences. In: Howe A. L. (Ed), *Housing for older Australians: affordability, adjustments and care*. Canberra: Australian Government Publishing Service, 60-86.
- Howe, A. L., Jones, A. E., & Tilse, C. (2013). What's in a name? Similarities and differences in international terms and meanings for older peoples' housing with services. *Ageing and Society*, 33(04): 547-578.

- Hu, X., Xia, B., Buys, L., Skitmore, M., Kennedy, R., & Drogemuller, R. (2015a). Stakeholder analysis of a retirement village development in Australia: insights from an interdisciplinary workshop. *International Journal of Construction Management*, 15 (4): 299-309.
- Hu, X., Xia, B., Skitmore, M., & Buys, L. (2015b). *Conceptualizing sustainable retirement villages in Australia*. In Raidén, A B and Aboagye-Nimo, E (Eds) Procs of the 31st Annual ARCOM Conference, 7-9 September 2015, Lincoln, UK, Association of Researchers in Construction Management, 357-366.
- Humpel, N., O'Loughlin, K., Snoke, M., & Kendig, H. (2010). Australian baby boomers talk about the global financial crisis. *Australasian journal on ageing*, 29(3), 130-133.
- Hunt, J., Jamieson, S., Ho, G., & Anda, M. (2007). *Bridgewater Lifestyle Village: A case study in innovative urban water management*, The 13th International Rainwater Catchment Systems Conference and the 5th International Water Sensitive Urban Design Conference, Sydney, Australia.
- Jones Lang LaSalle (2008). Development in the retirement living sector: Is supply meeting demand or missing the mark?. Retrieved December 2014, from <http://www.communityliving.net.au/home/DigitalAssets/research/joneslanglasalle/693921031/DigitalAssetsFile>
- Jones, A., Tilse, C., Bartlett, H., & Stimson, R. (2008). Integrated housing, support and care for people in later life. Australian Housing and Urban Research Institute. Retrieved September 2016, from https://www.ahuri.edu.au/__data/assets/pdf_file/0013/2731/AHURI_Positioning_Paper_No108-Integrated-housing,-support-and-care-for-people-in-later-life.pdf

- Jones, A., Howe, A., Tilse, C., Bartlett, H., & Stimson, B. (2010). Service integrated housing for Australians in later life. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_20287_fr
- Judd, B., Kavanagh, K., Morris, A., & Naidoo, Y. (2003). Housing options and independent living: Sustainable outcomes for older people who are homeless. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_70135_pp
- Judd, B., Olsberg, D., Quinn, J., Groenhart, L., & Demirbilek, O. (2010). Dwelling, land and neighbourhood use by older home owners. Australian Housing and Urban Research Institute. Retrieved September 2016, from http://www.ahuri.edu.au/_data/assets/pdf_file/0017/2168/AHURI_Final_Report_No144_Dwelling,-land-and-neighbourhood-use-by-older-home-owners.pdf?utm_source=website&utm_medium=report.PDF&utm_campaign=http://www.ahuri.edu.au/research/final-reports/144
- Judd, B., Liu, E., Easthope, H., Davy, L., & Bridge, C. (2014). Downsizing among older Australians. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_70687_fr
- Kendig, H., & Gardner, I. (1997). Unravelling housing policy for older people. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Ageing and social policy in Australia*. Cambridge: Cambridge University Press, 174-193.
- Kendig, H., Wells, Y., O'Loughlin, K., & Heese, K. (2013). Australian baby boomers face retirement during the global financial crisis. *Journal of aging & social policy*, 25(3), 264-280.
- Kendig, H., Crisp, D., Gong, C., Conway, E. & Squires, B. (2014). An investigation of the IRT retirement community landscape: a pilot study. IRT. Retrieved September 2016, from

- http://www.irt.org.au/images/IRT_Foundation/Foundation_PDFs/Investigation_of_the_IRT_landscape_-_Pilot_research_report_Oct.2014.pdf
- Kennedy, D. J. & Coates, D. (2008). Retirement village resident satisfaction in Australia: a qualitative enquiry. *Journal of Housing For the Elderly*, 22 (4), 311-334.
- Knight, S. C. & Buys, L., (2003). The involvement and influence of adult children in their parents' decision to move to a retirement village. *Australasian Journal on Ageing*, 22(2): 91-93.
- Kupke, V. (2001). Relocating for retirement in South Australia. *Pacific Rim Property Research Journal*, 7(3): 168-181.
- Legge, V. (1984). Attitude to living in a retirement village. *Australian Journal on Ageing*, 3(1): 3-7.
- Lord, S. R., Castell, S., Corcoran, J., Dayhew, J., Matters, B., Shan, A. & Williams, P. (2003). The effect of group exercise on physical functioning and falls in frail older people living in retirement villages: a randomized, controlled trial. *Journal of the American Geriatrics Society*, 51(12): 1685-1692.
- Manicaros, M. A. & Stimson, R. J. (1999). *Living in a retirement village attitudes, choices and outcomes*. Queensland: University of Queensland Press.
- McNelis, S. (2004). Independent living units: the forgotten social housing sector. Australian Housing and Urban Research Institute. Retrieved September 2016, from https://www.ahuri.edu.au/__data/assets/pdf_file/0016/2086/AHURI_Final_Report_No53_Independent_living_units_the_forgotten_social_housing_sector.pdf
- McNelis, S. (2007). Independent living units: Managing and renewing an ageing stock. *Australasian Journal on Ageing*, 26(3), 109-114.

- McCrindle (2011). The McCrindle Baynes village census report 2011. Retrieved December 2014, from http://www.australiancommunities.com.au/resources/whitepapers/McCrindle-Research-Baynes-Villages-Census-Report-Summary_McCrindle-Research.pdf
- McCrindle (2013). McCrindle Baynes village census report. Retrieved December 2014, from <http://www.agedcarevic.org.au/resources/reports/McCrindle-Baynes-Villages-Census-Report-2013-Executive-Summary.pdf>
- McCullagh, R. (2014). Care in Australian Retirement Villages. *Elder Law Review*, 8: 1-19.
- McDonald, J. (1986). Retirement Villages: Segregated Communities? *Australian Journal on Ageing*, 5(2): 40-46.
- McDonald, J. (1996). Community participation in an Australian retirement village. *Australian Journal on Ageing*, 15 (4), 167-171.
- McGovern, S. & Baltins, E. (2002). The retirement village industry in Australia: evolution and structure. In: Stimson R. (Ed), *The retirement village industry in Australia: evolution, prospects, challenges*. Queensland: University of Queensland Press, 23-46.
- McGovern, S. & Earl, G. (2002). Affordability issues and retirement villages. In: Stimson R. (Ed), *The retirement village in Australia: evolution, prospects, challenges*. Queensland: University of Queensland Press, 89-106.
- McNelis, S., & Herbert, T. (2003). Independent Living Units: Clarifying Their Current and Future Role as an Affordable Housing Option for Older People with Low Assets and Low Incomes. Australian Housing and Urban Research Institute. Retrieved November 2015, from http://www.ahuri.edu.au/publications/download/ahuri_50138_pp
- Miller, E. & Buys, L. (2007). Predicting older Australians' leisure time physical activity. *Activities, Adaptation & Aging*, 31 (3), 13-30.
- Miskovski, k., Chenoweth, L. & Moore, B. (2015). Living with dementia in retirement villages. Alzheimer's Australia NSW Discussion Paper 13. Retrieved March 2016, from

https://nsw.fightdementia.org.au/sites/default/files/NSW/documents/Discussion_Paper-Dementia_in_Retirement_Villages.pdf

Nathan, A., Wood, L. & 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.

Nathan, A., Wood, L., & Giles - Corti, B. (2014a). Examining correlates of self-reported and objectively measured physical activity among retirement village residents. *Australasian journal on ageing*, 33(4): 250-256.

Nathan, A., Wood, L. & Giles-Corti, B. (2014b). Exploring socioecological correlates of active living in retirement village residents. *Ageing and Physical Activity*, 22(1): 1-15.

Nathan, A., Wood, L., & Giles-Corti, B. (2014c). Perceptions of the built environment and associations with walking among retirement village residents. *Environment and Behavior*, 46(1): 46-69.

O'Loughlin, K., Humpel, N., & Kendig, H. (2010). Impact of the global financial crisis on employed Australian baby boomers: a national survey. *Australasian Journal on Ageing*, 29(2), 88-91.

Omoto, A. M. & Aldrich, C. D. (2006). Retirement community life: issues, challenges, and opportunities. *Annual Review of Gerontology and Geriatrics*, 26 (1), 283-303.

Ozanne, E. (2009). Negotiating identity in late life: Diversity among Australian baby boomers. *Australian Social Work*, 62(2), 132-154.

Petersen, M. & Warburton, J. (2012). Residential complexes in Queensland, Australia: a space of segregation and ageism?. *Ageing & Society*, 32 (1), 60-84.

Pinnegar, S., Van den Nouwelant, R., Judd, B., & Randolph, W. (2012). Understanding housing and location choices of retiring Australians in the 'baby boom' generation. City Futures Research Centre. Retrieved September 2016, from

- <https://www.be.unsw.edu.au/sites/default/files/upload/pdf/cityfutures/cfupdate/NHSCFINALSept2012%282%29.pdf>
- Productivity Commission (2011). Caring for older Australians. Retrieved December 2014, from http://www.pc.gov.au/__data/assets/pdf_file/0004/110929/aged-care-volume1.pdf
- Productivity Commission. (2015). Housing decisions of older Australians. Retrieved September 2016, from <http://www.pc.gov.au/research/completed/housing-decisions-older-australians/housing-decisions-older-australians.pdf>
- Property Council of Australia. (2015). The 5 A's of retirement living – towards proactive planning policy. Retrieved March 2016, from <http://www.retirementliving.org.au/wp-content/uploads/2013/12/5As-of-Retirement-Living-towards-proactive-planning-policy-web.pdf>
- PwC Australia. (2014). Supporting the nation's ageing population. Retrieved March 2016, from <http://www.pwc.com.au/press-room/2014/supporting-ageing-population-nov14.html>
- Quine, S. & Carter, S. (2006). Australian baby boomers' expectations and plans for their old age. *Australasian Journal on Ageing*, 25 (1), 3-8.
- Retirement Living Council (2013a). Profile: Retirement Village Residents. Retrieved December 2014, from <http://www.retirementliving.org.au/wp-content/uploads/2013/12/Retirement-Village-Residents-Profile.pdf>
- Retirement Living Council (2013b). Profile: Retirement Village Operators. Retrieved December 2014, from <http://www.propertyoz.com.au/library/Retirement%20Village%20Operators%20Profile.pdf>
- Retirement Living Council (2014). Advancing the quality of retirement living data: introducing the PwC/Property Council Retirement Database. Retrieved December 2014,

- from http://www.retirementliving.org.au/wp-content/uploads/2014/11/127021469_Retirement-Living-Infographic_v10.pdf
- Roberts, M. (1997). Housing with care: housing policies for an ageing Australia. *Ageing International*, 23 (3-4), 90-106.
- Rogers, M. F. (2014). Will baby boomers create new models of retirement community in rural Australia?. *Australasian Journal on Ageing*, 33 (4), 46-50.
- Sivam, A. & Karuppanan, S. (2007). *Ageing and its implications for housing and urban development: south Australia*, The conference on State of Australian Cities (SOAC), November 2007, Adelaide, Australia.
- Snoke, M., Kendig Prof, H., & O'Loughlin Dr, K. (2011). Australian evidence of baby boomers financial security: A review. *Journal of Economic and Social Policy*, 14(1), Article 8.
- Stein, I., & Morse, C. (1994). Relocation of the aged - A literature review. *Australian Journal on Ageing*, 13(1), 41-43.
- Stimson, R. J. & McCrea, R. (2004). A push-pull framework for modelling the relocation of retirees to a retirement village: the Australian experience. *Environment and Planning A*, 36 (8), 1451-1470.
- Stimson, R. J., McCrea, R. & Star, L. (2002). What retirees look for in a retirement village. In: Stimson R.J. (Ed), *The retirement village industry in Australia: evolution, prospects, challenges*. Queensland: University of Queensland Press, 73-88.
- Towart, L. (2005). Retirement villages: a sunset industry in a sunrise situation. *Australian Property Journal*, 38 (5), 350-361.
- Towart, L. C. (2013a). *Who Lives in Retirement Villages; are they wealthy enclaves, ghettos or connected communities?*, State of Australian Cities Conference, November 2013, Sydney, Australia.

- Towart, L. C. (2013b). *Co-Location of Retirement Villages and Residential Aged Care Facilities*, Australian Association of Gerontology 2013 Conference, November 2013, Sydney, Australia.
- U'Ren, B. (2013). *Retirement housing and medical facilities: preference, proximity and price* (PhD thesis), Bond University.
- Walker, E. & McNamara, B. (2013). Relocating to retirement living: an occupational perspective on successful transitions. *Australian Occupational Therapy Journal*, 60 (6), 445-453.
- Wang, R., Sedransk, J. & Jinn, J. H. (1992). Secondary Data Analysis When There are Missing Observations. *Journal of the American Statistical Association*, 87 (420), 952-961.
- Xia, B., Skitmore, M., Zuo, J. & Buys, L. (2014a). Review of community facilities in Australian retirement villages: A content analysis. *Australasian Journal on Ageing*. doi: 10.1111/ajag.12153
- Xia, B., Zuo, J., Skitmore, M., Buys, L. & Hu, X. (2014b). Sustainability literacy of older people in retirement villages. *Journal of aging research*. doi:10.1155/2014/919054
- Xia, B., Zuo, J., Skitmore, M., Chen, Q. & Rarasati, A. D. (2015). Sustainable retirement village for older people: a case study in Brisbane, Australia. *International Journal of Strategic Property Management*, 19 (2), 149-158.
- Zuo, J., Xia, B., Barker, J. & Skitmore, M. (2014). Green buildings for greying people: a case study of a retirement village in Australia. *Facilities*, 32 (7/8), 365-381.

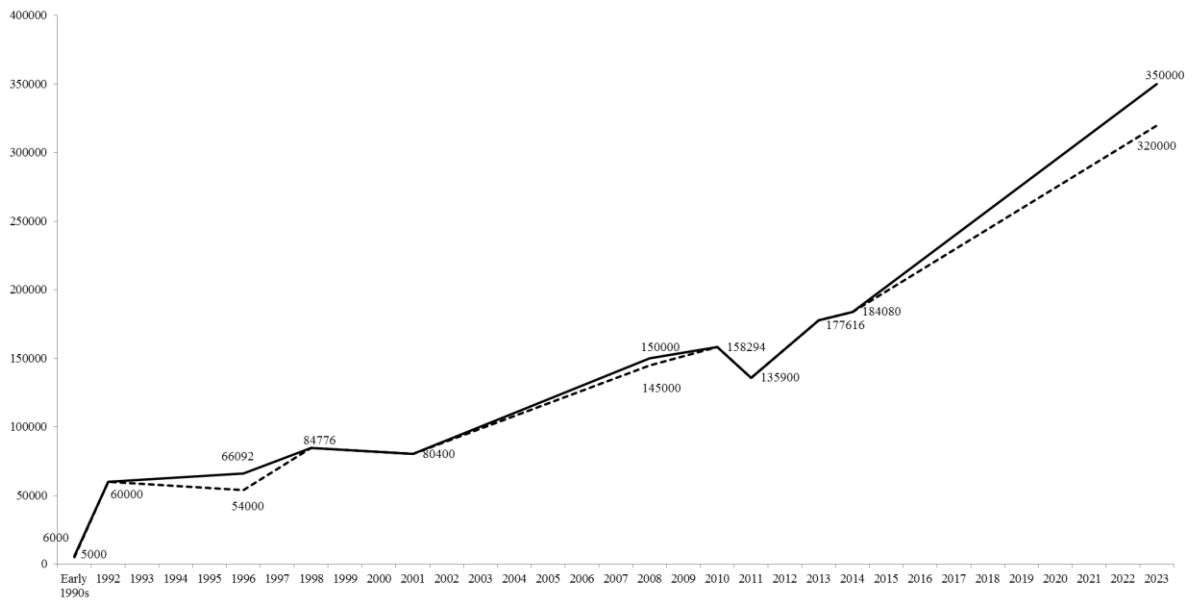


Figure 1. Number of residents living in Australian retirement villages.
 Sources: Manicaros and Stimson (1999); Howe (1992); Australian Bureau of Statistics (1999); Australian Bureau of Statistics (2000); Australian Bureau of Statistics (2003); Australian Bureau of Statistics (2013c); Jones Lang Lasalle (2008); Retirement Living Council (2013a); Productivity Commission (2011); Grant Thornton, (2014)



Figure 2. Number of the retirement village residents in each region.
Source: Retirement Living Council (2013a)

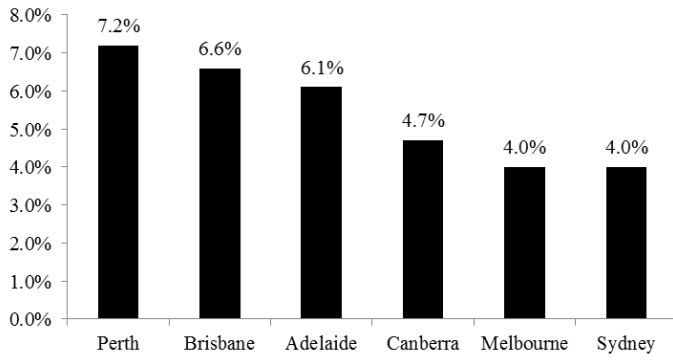


Figure 3. Percentage of 65+ people living in retirement villages in capital cities in 2013.
Source: Retirement Living Council (2013a)

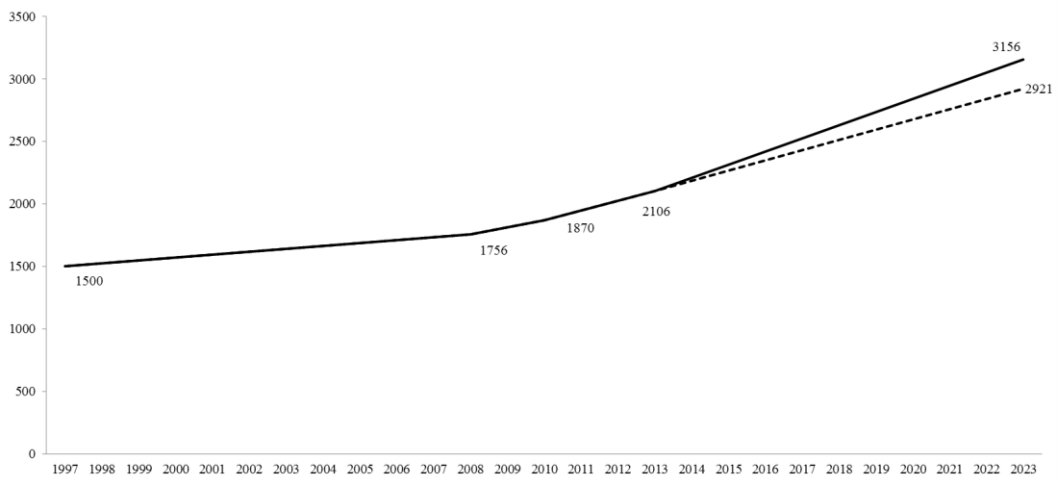


Figure 4. Number of retirement villages.

Sources: Jones Lang Lasalle (2008); Retirement Living Council (2013b); Productivity Commission (2011)



Figure 5. Number of retirement villages in each region in 2013.
Adapted from: Retirement Living Council (2013b)

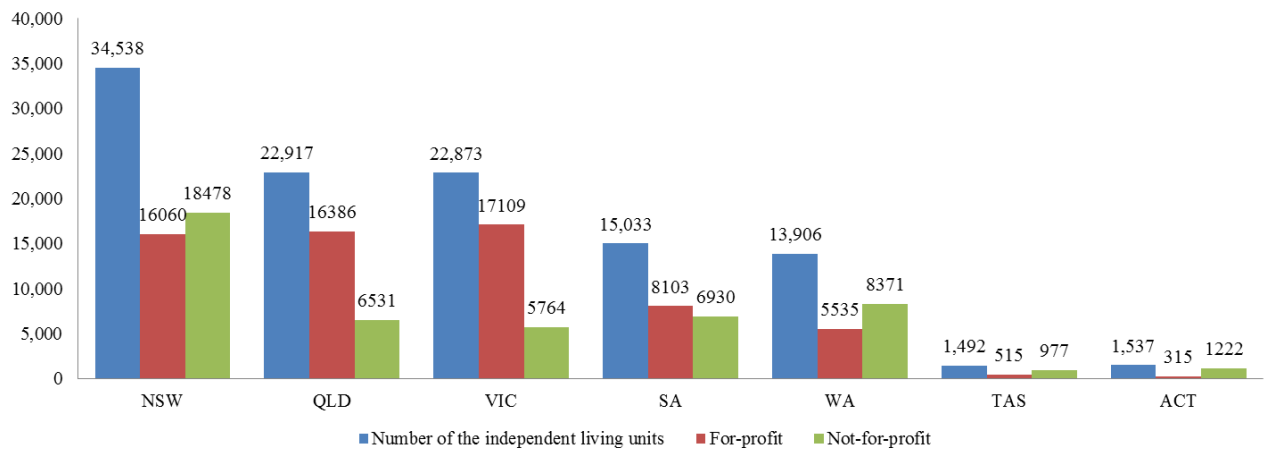


Figure 6. The number of the independent living units in each region in 2013.
Adapted from: Retirement Living Council (2013b)

Table 1. Retirement village legislations of each state

State	Legislations
SA	Retirement Village Act 1987; Retirement Village Regulations 2006;
ACT	Retirement Village Act 2012; Retirement Village Regulations 2013;
NT	Retirement Village Act; Retirement Village Regulations; Retirement Villages Code of Practice;
NSW	Retirement Village Act 1999; Retirement Village Regulations 2009;
VIC	Retirement Village Act 1986; Retirement Villages (Records and Notices) Regulations 2005; Retirement Villages (Contractual Arrangements) Regulations 2006;
QLD	Retirement Villages Act 1999; Retirement Villages Regulations 2010;
WA	Retirement Villages Act 1992; Retirement Villages Regulations 1992; Fair Trading (Retirement Villages Code) Regulations 2014;
TAS	Retirement Villages Act 2004; Retirement Villages Regulations 2005;

Table 2. Proportion of village residents to the senior population (65+) in each region in 2013.

NSW	VIC	QLD	SA	WA	TAS	ACT	Australia
4.3%	4.1%	7.5%	6.5%	7.5%	3.1%	5.2%	5.32%

Table 3. Average size of a retirement village in each region in 2013.

Region	NSW	VIC	QLD	SA	WA	TAS	ACT
Average number of residents	71	85	146	41	105	60	73
Average number of independent living unit	51	56	70	34	62	32	50