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Exploring the Housing Needs of Older People in Standard and Sheltered Social Housing

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Abstract

Objective: Our home can have a major impact on our physical and mental health; this is particularly true for older people who may spend more time at home. Older people in social (i.e., public) housing are particularly vulnerable. Housing options for older people in social housing include standard design dwellings or specially designed "sheltered housing." The most suitable housing model should be identified, with older people consulted in this process. **Method:** Survey of older people (aged ≥60) living in standard or sheltered social housing. Data were analyzed using descriptive and inferential statistics in SPSS Version 22. **Results:** Overall, 380 surveys were returned (response rate = 47.2%). All older people had similar housing needs. Those in sheltered housing were more satisfied with the physical home design and reported more positive outcomes. Older people in standard housing were less likely to have necessary adaptations to facilitate aging-in-place. **Discussion:** Older people in standard housing reported more disability/illnesses, are worried about the future, and felt less safe at home. However, few wanted to move, and very few viewed sheltered housing as an alternative, suggesting limited knowledge about their housing options. Future social housing designs should be flexible, that is, adaptable to the needs of the tenants over time.

Keywords

social housing, sheltered housing, assisted living, older people, survey

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Introduction

The house we live in and where we live can have a major impact on our physical and mental health; this is particularly true for groups of people who tend to spend more time in the home, including older adults (Centre for Ageing Research and Development in Ireland, 2013). The standard and suitability of older people's accommodation is vital to their quality of life and is a key factor in their capacity to take care of themselves or to be cared for at home should they become dependent (Cullen, Delaney, & Dolphin, 2007, p. 16).

Social housing, which is equivalent to public housing in the United States, is rental housing which is provided outside of normal housing market processes on a subsidized basis to people who cannot afford housing from their own resources (Fahey, 1999). Social housing has traditionally been supplied by local government, that is, city and county councils, who still provide the large bulk of social housing in Ireland. However, a small but growing number of households live in housing provided by charities known as not-for-profit or voluntary social housing associations.

Although approximately 15,000 households were recorded in the housing association sector in the 2011 Census (Central Statistics Office [CSO], 2012), this is likely a serious underestimate, with the true figure closer to 55,000 households. There are currently approximately 548 housing associations registered with the Irish Department of the Environment, Community and Local Government (DECLG, 2017) as "Approved Housing Bodies" (AHB). It is a "bifurcated" sector, with a small number of large housing associations providing the bulk of units, as is the case in countries such as Australia (McManus, 2014; Milligan et al., 2015). The expansion of the sector, whether through the large AHBs continuing to expand via newly constructed units/purchase of

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existing units, or mergers, is a key plank of the Irish government's "Social Housing Strategy 2020" which envisages a much expanded role for the sector in coming years (Finnerty & O'Connell, 2016). The housing stock from which offers are made by housing associations to qualified households is either (a) owned by housing associations themselves (direct provision), (b) leased from local authorities, or (c) leased from private property owners.

Within the social housing sector, older people may live in different forms of housing, including standard dwellings or sheltered housing. The latter can be defined as group housing schemes for older people or disabled people where the residents have their own apartments or houses. The person's home is within a purpose-built, clustered arrangement (Cullen et al., 2007). Some group housing targets older persons specifically. As with other social housing types, rents are pitched at submarket levels, allocation of tenancies is subject to means testing, and this sheltered housing is managed by city or county councils or housing association charities.

Older people living in social housing are more vulnerable than their counterparts in the general population; they have poorer economic, social, and physical well-being and are at risk of experiencing poorer health and lower life expectancy (Wheatley, 2015).With the aging population in Ireland, and indeed worldwide, it is critical that the most suitable housing model within the social housing sector is identified, that is, one that best meets the needs of older people, and provision is cost-effective.

There has been a recent emphasis on "ageing-in-place" in research and policy. This is defined as "remaining living in the community, with some level of independence, rather than in residential care" (Davey, de Joux, Nana, & Arcus, 2004, p. 133). Assertions that people prefer to "age-in-place" thrive, as it is understood as enabling older people to maintain independence, autonomy, and connection to social support (Lawler, 2001). Housing is also seen as the most desirable setting for personal care and monitoring even when there is evidence of decline in physical and cognitive function (American Association of Retired Persons, 2000). There is also broad agreement that helping people to continue to live in their own homes is desirable on economic grounds as it is less expensive than options such as residential care (Sixsmith & Sixsmith, 2008). Older people living in social housing may age in place in either standard houses or sheltered houses, both options allow the person to live in the community.

There is some evidence to support some advantages of living in sheltered housing. Walker, Orrell, Manela, Livingston, and Katona (1998) found that the prevalence of depression was lower in sheltered housing than in the general community. van Bilsen, Hamers, Groot, and Spreeuwenberg (2008) found that older people living in sheltered accommodation had a higher perceived autonomy, sense of security, and quality of life. Evidence for its cost-effectiveness is somewhat mixed; however, this is offset by more consistent findings of physical, social, and mental health benefits for tenants of sheltered schemes (Bäumker, Netten, & Darton, 2010; Croucher et al., 2008; Netten, Darton, Bäumker, & Callaghan, 2011).

Across housing sectors, there are a number of housing related factors which have previously been linked to older people's health and well-being. These include: the physical condition of the home, for example, homes with poor heat insulation or damp homes are linked to poor health in older people (Goodman et al., 2011); good home design, for example, adaptations to prevent falls such as handrails (Heywood, 2001); and dementia-friendly designs, i.e., homes which are easy to move about in, easy to understand and manage (National Disability Authority [NDA], 2015). Assistive technology (e.g., alarms, telecare) may also have the potential to assist in enabling older people and/or those with dementia to remain in their own homes (Cahill, Begley, Faulkner, & Hagen, 2007). Physical modifications to the original structure and design of dwellings, especially in relation to improving accessibility of home environments, have also been shown to be key elements in facilitating aging-in-place (Hwang, Cummings, Sixsmith, & Sixsmith, 2011).

Home location is also key. Loneliness is an independent risk factor for depression, and it can have a significant impact on physical health, being linked detrimentally to higher blood pressure, worse sleep, immune stress responses, and worse cognition over time in the elderly (O'Luanaigh & Lawlor, 2008). One in three people above the age of 65 and living in their own homes experience feelings of loneliness (Lawlor et al., 2014, cited in Heenan, 2010).

It is clearly important that the most appropriate models of housing provision for older people are investigated, and this is particularly important for older people living in social housing who may be at more risk of adverse life outcomes. However, there is a paucity of research investigating the opinions and attitudes of older people themselves. This research describes a survey of older adults living in two forms of social housing ("standard" or "sheltered"), asking them what they feel are their current and anticipated housing needs.

The research question which framed our investigation was the following:

Research Question 1: What do older people living in social housing feel are their main housing, and related, needs?

Specific hypotheses were the following:

Hypothesis 1: Overall, most older people will be happy in their social housing.
Hypothesis 2: Within social housing, older people living in sheltered housing will be more satisfied, and report more positive outcomes, than those living in standard housing.

Method

Design

A survey was developed, with two versions for (a) standard and (b) sheltered social housing, following an in-depth review of literature, research, and policy documents. This included "Age Friendly Ireland" surveys and the NDA Dementia Report. The surveys were then piloted on a community sample of older people (n = 10) to assess usability; all found the questions easy to understand and no further edits were made.

Population

The study population were all tenants aged 60 years and older of a large Irish housing association.

The housing association provides affordable high quality social housing for people of all ages who cannot afford to buy their own home or pay for private rented housing. The type of social housing for older tenants is either standard design dwelling or specially designed sheltered housing. *Sheltered housing* is defined by this housing association as purpose-built housing that allows residents to live independently, with the help of some additional supports. All the homes are fully self-contained and are either own-door bungalows or apartments. Most have a 24-hr alarm call system and other on-site facilities such as a laundry, communal facilities, social activities, and so on. Each sheltered housing scheme has a scheme manager who deals with the day-to-day running of the scheme, ensures that residents' needs are met, and who encourages social activities within the scheme. Finally, all these sheltered housing schemes are planned to merge seamlessly with the wider community so that older people have access to additional activity and resources.

Sample

We completed a census of tenants within sheltered housing (n = 415). We sampled two thirds of tenants within standard housing (n = 413) using stratified random sampling. We divided the population into six geographical groups and used an online random number generator to choose two thirds of tenants from each region to be included in the sample. This was to maximize the geographic representativeness of the sample.

Data Collection

An information sheet, with an opt-out option, was distributed to the population to advise them that they would be receiving a survey. Local housing managers were proactive in the advertisement of the survey on community notice boards, at tenant meetings, and provision of reminders. Multiple reminders were also sent by text message (n = 2).

Tenants has a choice of two survey completion methods: (a) self-complete the paper survey and return using the prestamped envelope provided and (b) dial a dedicated number and complete the survey over the phone with a researcher (option provided so that those with low literacy and/or poor vision could be included).

Data Analysis

Survey data were first explored using descriptive statistics with SPSS Version 22. Where data were missing for a question (i.e., where some participants skipped a question), the valid percentage is reported. Statistical differences were investigated using chi square for categorical variables and t tests for continuous variables. Likert-type scale data were analyzed using parametric tests, given the large sample sizes, such that the parametric tests would remain valid even if normality was significantly violated (Sullivan & Artino, 2013). Furthermore, it has been shown that t tests have similar power to nonparametric alternatives for 5-point Likert-type items (de Winter & Dodou, 2010). Open-ended "qualitative" answers were analyzed using simple content analysis.

Ethics

This study was granted ethical approval from the Social Research Ethics Committee at University College Cork. Participation in the survey was voluntary, and 23 people opted out (standard schemes = 17; sheltered schemes = 6), making a total survey population of 805.

Results

Response Rates

There was an overall response rate of 47.2% (380/805). Similar response rates were achieved in standard (46.0%; 182/396) and sheltered schemes (48.4%; 198/409). The majority of surveys were self-completed (90.2%; 342/379). There were no significant sex, age, or self-reported health differences between those who completed by post versus by phone.

Demographics

Sex and age. The two samples did not differ significantly by sex (p = .108); across the two samples, 55.4% (204/368) of respondents were male. With regard to age, those living in sheltered accommodation were older than those in standard accommodation, $\chi^2(6, n = 377) = 21.46$, $p < .05$. For a detailed summary of sample demographics, see Table 1.

Living arrangements. On average, respondents in standard housing had been living in their current home for 6.9 years (SD = 4.6; range = 3 months-20 years), and respondents in sheltered housing had been living in their

Table 1. Demographic Details.

	Standard		Sheltered		Total	
	%	*n*/*N*	%	*n*/*N*	%	*n*/*N*
Sex						
Male	59.9	103/172	51.5	101/196	55.4	204/368
Female	40.1	69/172	48.5	95/196	44.6	164/368
Age (years)						
60-64	39.7	71/179	23.2	46/198	31.0	117/377
65-69	28.5	51/179	23.2	46/198	25.7	97/377
70-74	15.6	28/179	23.2	46/198	19.6	74/377
75-79	10.1	18/179	14.6	29/198	12.5	47/377
80-84	4.5	8/179	10.1	20/198	7.4	28/377
85-89	1.1	2/179	3.0	6/198	2.1	8/377
90+	0.6	1/179	2.5	5/198	1.6	6/377
Living alone						
Yes	69.1	123/178	85.9	165/192	77.8	288/370
No	30.9	55/178	14.1	27/192	22.2	82/370
Marital status						
Single	20.9	38/178	36.4	72/193	29.6	110/371
Married/living with partner	21.9	39/178	10.9	21/193	16.2	60/371
Widowed	17.4	31/178	20.2	39/193	18.9	70/371
Divorced/separated	38.2	68/178	30.1	58/193	34.0	126/371
Other	1.1	2/178	1.6	3/193	1.3	5/371

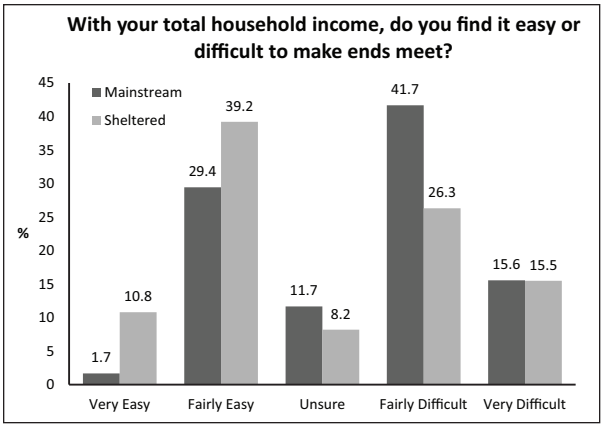


Figure 1. Household income.

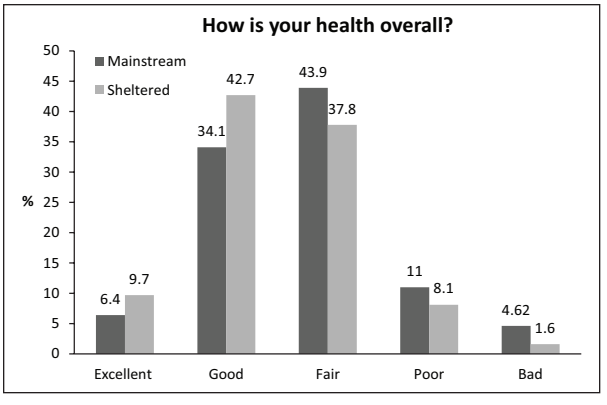


Figure 2. Self-reported health status.

current home for less time, on average 5.7 years (SD = 3.6; range = 2 months-20 years). This difference was significant, $t(317.11) = 2.71$, $p < .05$.

There were fewer respondents living alone in standard housing (69.1%; 123/178) compared with sheltered housing, 85.9%; 165/192; $\chi^2(1, n = 370) = 14.22$, $p < .01$.

Income. Within standard housing, when asked how easy or difficult people found it to make ends meet, the most common response option endorsed was "fairly difficult" (41.7%), whereas within sheltered housing the most common response was "fairly easy" (39.2%; see Figure 1). However, it is notable that a similar proportion reported finding it "very difficult" to make ends meet in standard (15.6%) and sheltered (15.5%) housing. Older people in standard housing found it more difficult to make ends meet, and this difference was significant, $t(369.43) = 3.47$, $p < .01$.

Health. Overall, self-reported health status was similar in both standard and sheltered housing tenants (see Figure 2), although tenants in sheltered housing reported accessing more health care services (see Table 2). Of the standard housing respondents, more than half (58.5%; 96/164) were living with an illness or disability themselves (47.8%; 87/164) or living with someone who has an illness/disability (4.9%; 9/164), which affects their daily life, compared with 38.7% (67/173) overall in sheltered housing, of whom were affected themselves (31.8%; 63/173) or lived with someone affected (2.0%; 4/173).

Mobility problems were also relatively common across groups; 29.2% (45/154) of respondents from

Table 2. Health Care Services Used by Respondents in the Previous Year.

Standard	Sheltered
General practitioner (n = 84)	General practitioner (n = 118)
Hospital Outpatient Centre (n = 64)	Hospital Outpatient Centre (n = 79)
Public health nurse (n = 37)	Public health nurse (n = 68)
Physiotherapist (n = 32)	Physiotherapist (n = 41)
Occupational therapist (n = 19)	Day center (n = 39)

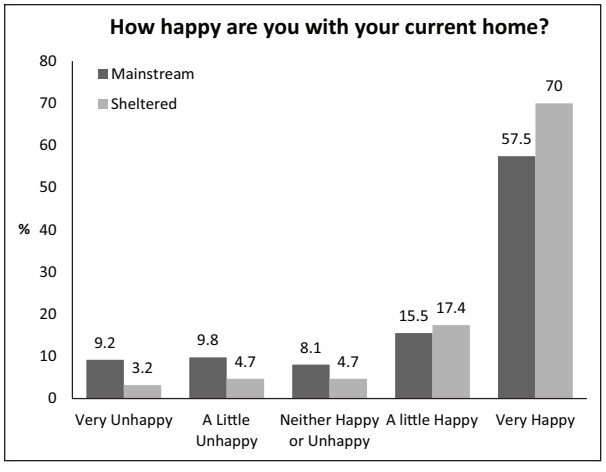


Figure 3. Satisfaction with home.

standard housing had (20.9%; 38/154), or lived with someone who had (3.8%; 7/154), a mobility problem compared with 26.8% (48/179) in sheltered housing who had (21.7%; 43/179), or lived with someone who had (2.5%; 5/179), a mobility problem.

Home and Support Needs of Older People

Satisfaction. Hypotheses 1 and 2 were supported in this data; overall participants were mostly "very happy" with their home in both standard (57.47%; 100/174) and sheltered housing (70.0%; 133/190); those in sheltered accommodation were happier with their home (see Figure 3), and the mean difference was significant, $t(315.23) = -3.46$, $p < .01$.

Among older people in standard housing, the most common reasons for being happy were the following: modern and well-maintained houses and apartments, affordable rent, having a nice garden, convenient locations, those which had adaptations for elderly and disabled, good landlords, good neighbors, and good security presence in apartment blocks. Those "neither happy or unhappy" tended to be happy with their physical home but worried about declining health or feeling isolated, for example, "on top floor of block, feel isolated sometimes," "due to long term health conditions and lack of transport location is problematic." The most common reasons cited for being unhappy were the following: not getting on with neighbors or antisocial behavior and expensive or ineffective heating systems.

Table 3. Common Responses to "What Is the 'Best' and the 'Worst' Thing About Your Present Home?"

Standard	Sheltered
"Best" thing	"Best" thing
Nice and compact and easy to keep	I feel safe and know there is help if I need it. I am not completely isolated
My home is near to everything	Near all facilities
Overlooks a green	It's very secure
It's my home	Fairly easy to keep clean and homely
"Worst" thing	"Worst" thing
No neighbor contact, no social meeting point, for example, social club	Not being able to have a dog
Noise from traffic (on main road) and poor sound insulation between houses	The cost of heating during the winter
No shower, just has a bath, needs [*sic*] it for disability	No balcony
No toilet downstairs	[Limited] storage space

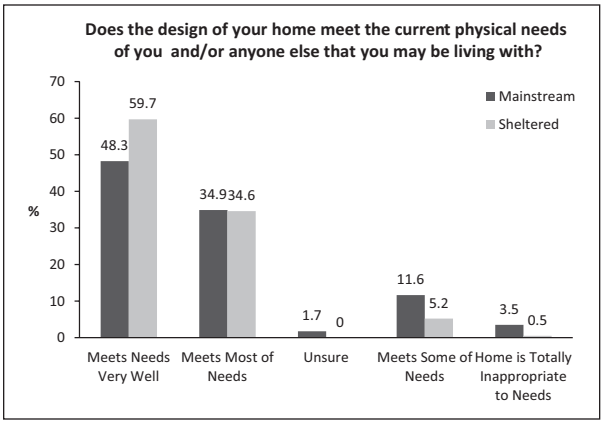


Figure 4. Design of home.

In sheltered social housing, the most common reasons participants cited for being happy with their homes were as follows: safety and security, peaceful environment, company of neighbors and staff, and being situated near facilities. Those who were neither happy nor unhappy liked their house but not the location (e.g., being far from family), felt lonely or, conversely, felt they lacked privacy. The minority who were unhappy, quoted the cost of rent, poor heating systems, and having to give up a pet to move in.

Exemplary quotes for the "best" and "worst" thing about their homes identified by participants are listed in Table 3.

Physical design of dwelling. As seen in Figure 4, the majority of respondents felt that the physical design of their

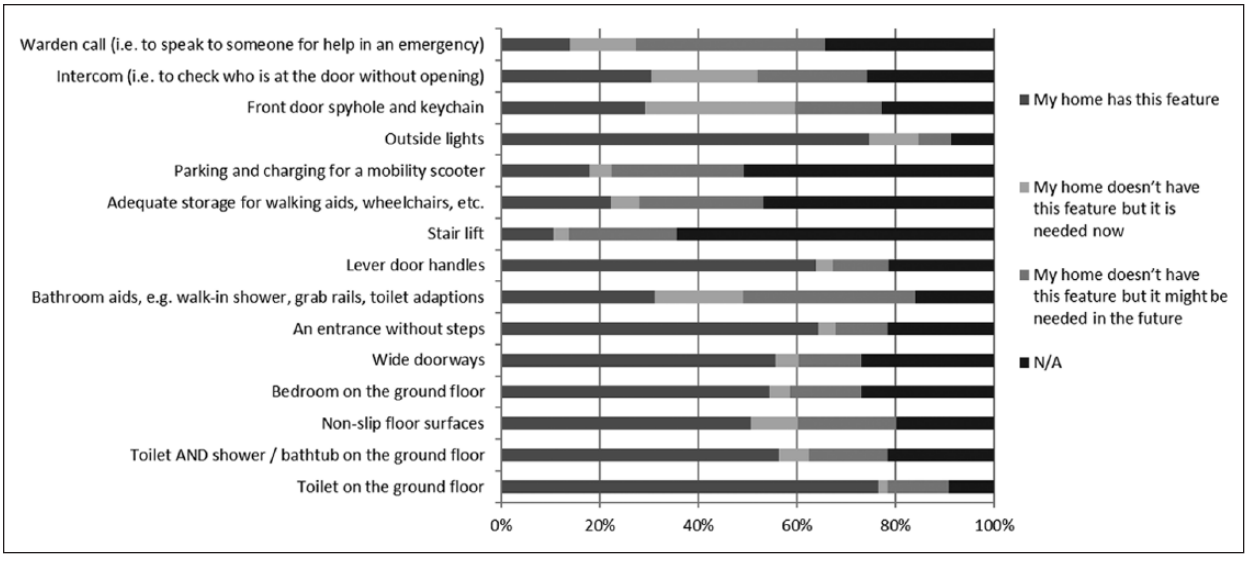


Figure 5. Features existing in, or needed in, mainstream homes.

home "met their needs very well" or "met most of their needs" in both standard (83.2%; 143/172) and sheltered housing (94.3%; 180/191). More respondents in sheltered housing felt that the design of their home met their needs "very well" (59.7%; 114/191) compared with those in standard housing (48.26%; 83/172). On average, tenants in sheltered social housing (n = 191, M = 1.52, SD = 0.79; $t(303.36) = 3.37$, $p < 0.1$) felt that the design of their home met their physical needs better than tenants in standard social housing (n = 172, M = 1.87, SD = 1.13). This supports our second hypothesis.

In standard social housing, respondents were happiest with homes which were modern, easy to maintain/keep clean, and/or were adapted for disability. One respondent said, "It is a ground floor which helps not having to climb stairs especially as I get older." Of the 26 standard respondents who reported home designs unfit for their needs, the most common complaints were not being able to use stairs and not having a walk-in shower or ground floor toilet where this was needed. Some respondents elaborated on this: "I was stuck in bath for one hour. People who are older should have a walk-in shower"; "Stairs are steep now that I am 70+"; "Both of us have diabetes, and would appreciate a ground floor toilet."

Respondents in sheltered housing were happy with manageably sized accommodation, often on one level or with a stair lift, bathrooms converted for high needs, good security, and warm and cozy homes: "Nice open plan, warm and secure," "Walk-in shower, no steps or stairs." For the minority of respondents reporting unmet needs (5.7%; 11/191), the most common need was a walk-in shower where they had a bath; others were heavy doors, for example, "[I am] unable to open the doors out of building without aid."

Adaptations/support features. Older people living in both standard and sheltered housing were asked about their needs for certain features of a house (see Figures 5 and 6). For every feature listed, a higher percentage of respondents in sheltered housing reported already having the feature, adding further support to Hypothesis 2 that sheltered houses are more suitable for tenants' needs, resulting in better outcomes. One specific example is bathroom adaptations, which were already highlighted as a primary concern in both groups, where more respondents in sheltered than in standard housing had bathroom aids (56.2% [95/169] vs. 31.2% [49/25]), nonslip floor surfaces (85.7% [138/161] vs. 50.7% [74/146]), a bathroom with toilet and bath/shower on the ground floor (81.6% [133/163] vs. 56.4% [84/149]), and a toilet on the ground floor (86.3% [139/161] vs. 76.5% [124/162]).

The features needed most urgently by standard tenants (>25%) were the following:

- Bathroom aids (17.8% [28/157] need now; 35.0% [55/157] may need in the future);
- Warden call (13.3% [19/143] need now; 38.5% [55/143] may need in the future);
- Front door spyhole and keychain (30.5% [47/154] need now; 17.5% may need in the future);
- Intercom (21.6% [32/148] need now; 22.3% [33/148] may need in the future);
- Adequate storage for walking aids, wheelchair, and so on (5.8% [8/139] need now; 25.2% [35/139] may need in the future);
- Parking and charging space for mobility scooter (4.5% [6/134] need now; 26.9% [36/134] may need in the future).

The features needed most urgently by sheltered tenants (>25%) were the following:

- Bathroom aids (14.2% [24/169] need now; 20.1% [34/169] may need in the future);

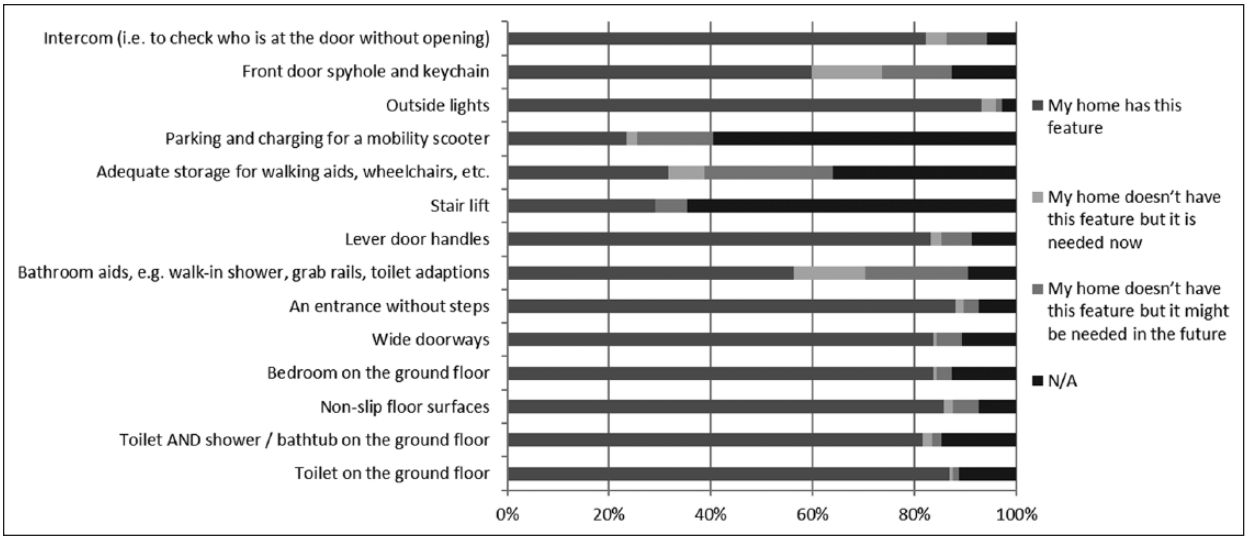


Figure 6. Features existing in, or needed in, sheltered homes.

- Adequate storage for walking aids, wheelchair, and so on (7.0% [10/142] need now; 25.4% [36/142] may need in the future);
- Front door spyhole and keychain (13.8% [22/159] need now; 13.8% [22/159] may need in the future).

Outdoor space. The majority of respondents in both standard and sheltered housing had access to private outdoor space such as a garden, balcony, or patio; however, more people living in standard housing had this feature (83.5%; 137/164) than those in sheltered housing (69.3%; 104/150). The difference was significant, $\chi^2(1, N = 314) = 8.86, p < .01$. The importance of private outdoor space was expressed well by one person living in a standard scheme apartment: "I feel locked in at times. [I am] not able to step outside. [I have] no garden and [am an] outdoor person." This does not support Hypothesis 2 and suggests that access to outdoor space is a feature that should be included in future sheltered housing designs.

Fuel poverty. Whereas most respondents across housing schemes found it fairly or very easy to heat their homes, almost one quarter experienced some degree of fuel poverty, that is, 24.4% (90/369) responded with "fairly" or "very difficult" (Figure 7); this is in line with the relatively high proportion of individuals reporting that they struggled to make ends meet in both groups. This is a sizable and significant percentage of tenants, considering the serious health implications associated with fuel poverty. For those who found it difficult to heat their home, the reason most often quoted was the cost of gas/oil/briquettes; storage heaters were seen as particularly expensive. Other reasons included poor insulation. One respondent commented, "Storage heaters [are] not affordable to me so I never use any form of heat during the winter. I tend to put on more clothing and to go to bed very early in the death of winter." The difference between sheltered and standard social housing was nonsignificant, $t(367) = .529, p = .89$.

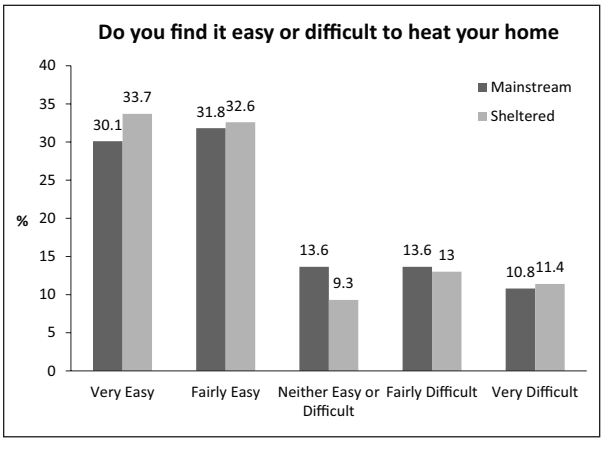


Figure 7. Fuel poverty.

Technology. Respondents from both standard and sheltered housing were equally likely to own a computer, laptop, or tablet ($p = .39$) and have access to broadband ($p = .83$). However, a greater percentage of those in standard housing than in sheltered housing would consider using technology for safety and security (76.7%; 132/172 vs. 55.6%; 101/182) and health monitoring (69.5%; 114/164 vs. 53.1%; 94/177). These differences were significant at $\chi^2(1, N = 341) = 9.63, p < .01$ and $\chi^2(1, N = 354) = 17.75., p < .01$, respectively. This suggests that assistive technologies may not be a suitable support for older people in sheltered housing.

The neighborhood. As can be seen in Figure 8, respondents in both schemes felt that their neighborhood was safe overall. However, those in sheltered housing reported feeling "very safe" (50%; 97/194) more than

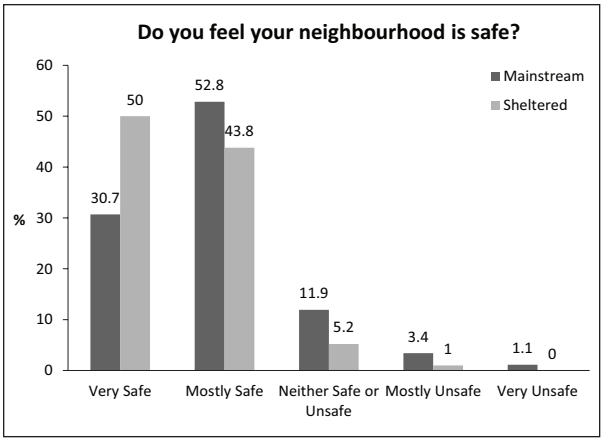


Figure 8. Neighborhood safety.

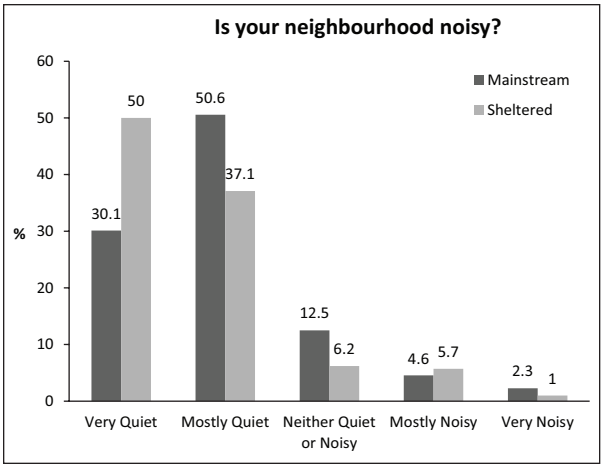


Figure 9. Neighborhood peacefulness.

those in standard housing (30.68%; 54/176). The difference was significant, with tenants in sheltered housing (n = 194, M = 1.57, SD = 0.64) reporting feeling safer than those in standard housing (n = 176, M = 1.91, SD = 0.81; t[332.41] = 4.468, $p < .01$).

Overall, as Figure 9 shows, respondents reported peaceful neighborhoods (84.1% [311/370] reported "very" or "mostly" quiet), though more respondents in sheltered housing reported a "very quiet" neighborhood (50.0% [97/194]) compared with standard housing (30.11% [53/176]). The difference was significant with tenants in sheltered social housing reporting neighborhoods that were more quiet (n = 194, M = 1.98, SD = 0.90) than those in standard housing, (n = 176, M = 1.98, SD = 1.71; t[363.71] = 2.96, $p < .01$).

About one quarter of those in standard housing (24%; 41/171) and one in 10 of those in sheltered housing (9.9%; 19/191) reported having had an experience that left them concerned about their personal safety. These were typically in the form of antisocial behavior in the locality or neighborhood break-ins. A minority reported very serious crimes such as assault.

Overall, the data relating to the neighborhood are supportive of Hypothesis 2, with sheltered housing being located in neighborhoods perceived to be quieter and safer.

Health and support services. Tenants in standard housing only were asked whether they would like help with some activities or access to information (Figure 10). Across the categories, few respondents were already receiving such help; however, few felt that they would need such extra help in the future or at all. The two categories for which respondents most often "needed help now" were emergency alarms, that is, sensors in the home to detect problems and send help if needed (21.8%; 34/224); and help with minor repairs, for example, changing a light bulb or a fuse (15.7%; 26/214).

Social contact and meeting people. Most respondents had social contact every day of the week. However, about one quarter (24.2%; 44/166) of respondents in standard housing experienced days each week where they had no contact with neighbors or friends; for these people, the average days spent each week with no social contact was 4.5 (SD = 2.0; range = 1-7). This was compared with 15.1% in sheltered housing who experienced days during the week when they have no social contact. For these respondents, the average number of days with no social contact was 3.4 (SD = 2.1; range = 1-7).

Engagement in social activities was also proportionately lower among standard housing tenants; just over one third (36.8%; 63/171) of respondents regularly joined in the activities of a local social organization compared with about half (55.7%; 103/185) of those in sheltered housing. This difference was significant, $\chi^2(1, N = 356) = 12.67$, $p < .01$. Just below three quarters (72.2%; 117/162) of respondents in standard housing felt like a part of their community, compared with the majority (93.5%; 172/184) of those in sheltered housing. This difference was significant, $\chi^2(1, N = 346) = 28.29$, $p < .01$.

These results support Hypothesis 2; it appears that living in sheltered housing, in which multiple homes are provided within one complex and there is on on-site housing manager, provides significant benefits for social integration and well-being.

Looking to the future. This section asked respondents to indicate their level of agreement or disagreement with five statements concerning their future. Detailed responses can be seen in Figures 11 to 14.

Those in sheltered housing were more confident that they would get the supports they need to stay living in their own home as they get older (standard: n = 175, M = 1.95, SD = 0.99; sheltered n = 187, M = 1.58, SD = 0.82; t[338.11] = 3.94, $p < .01$) and those in sheltered housing also felt better informed about their available options with regard to their housing needs as they age

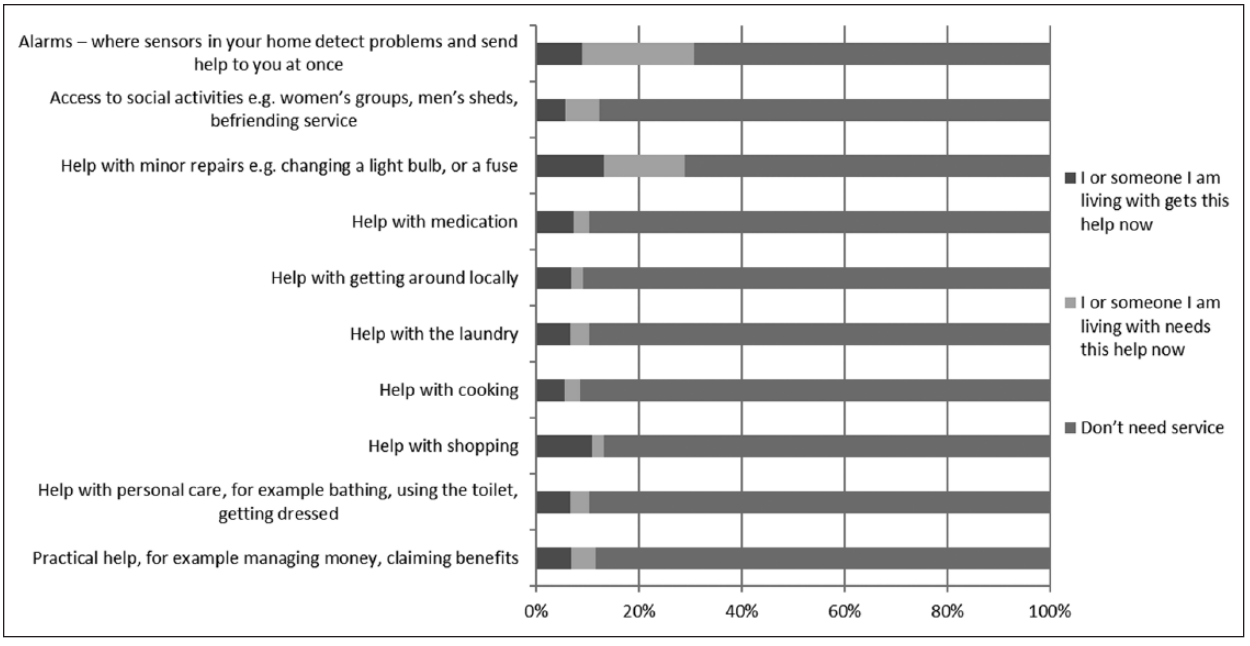


Figure 10. Services needed or not needed by older people in standard housing.

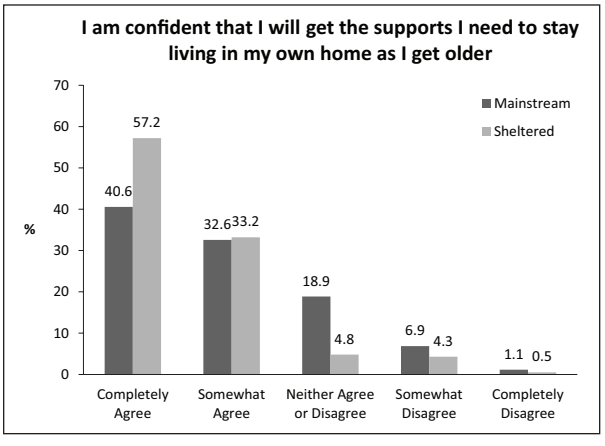


Figure 11. Looking to the future Q1.

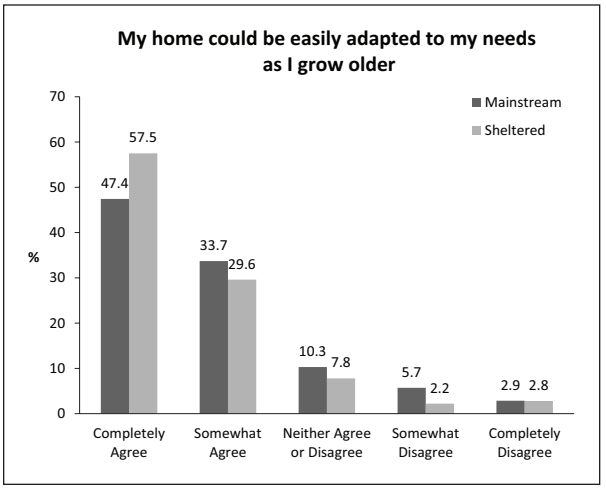


Figure 12. Looking to the future Q2.

(standard: n = 171, M = 2.18, SD = 1.17; sheltered n = 180, M = 1.84, SD = 1.06; t[2.86] = 2.87, $p < .01$).

There were no significant differences between older people living in standard and sheltered housing in the level of agreement with the statements "My home could be easily adapted to my needs as I grow older" (p = .058) and "I worry about having to move from my home into accommodation such as a nursing home" (p = .801); however, overall, there were notable worries about moving into a nursing home with about half of all older people surveyed having some worries about moving to a nursing home (49.1%; 170/346; see Figure 13).

Moving. If given the option, most respondents in standard housing would prefer to stay in their current home than move (65.3%; 27/170), some were equivocal (18.8%; 32/170), and 15.9% would like to move (27/170). Those who wanted to move would prefer other standard dwelling social housing (n = 30), sheltered housing (n = 10), or a nursing home (n = 2).

The most common reasons for wanting to move were the following: house unsuitable (n = 21), no social life or not enough friends nearby (n = 12), neighborhood unsafe or noisy (n = 8), illness or unable to cope with present home (n = 6), facilities needed are not convenient (n = 4). Other reasons given (n = 11) included not managing stairs, insufficient public transport, wanting own garden, and so on.

Some respondents suggested adaptations that would make their home more suitable to their current needs. These included the following: walk-in showers, stair lift, bathroom adaptations, garden or garden shed, and better heating systems. Others foresaw the need for such adaptations in the future.

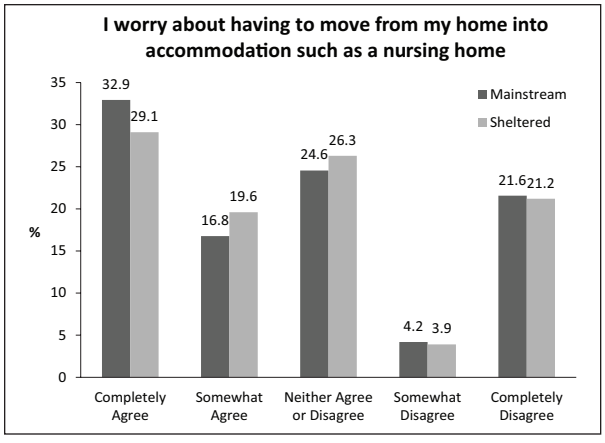


Figure 13. Looking to the future Q3.

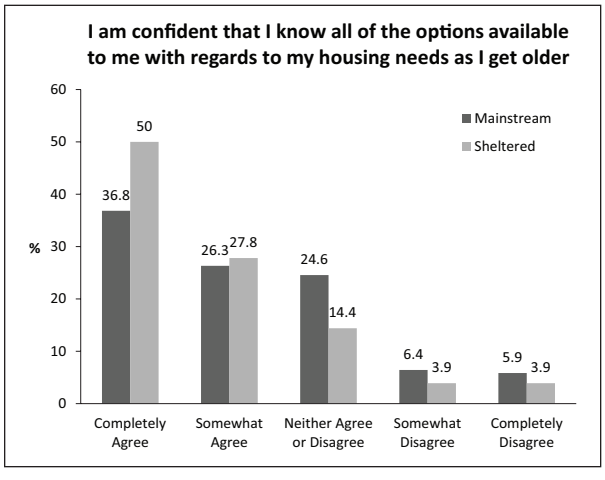


Figure 14. Looking to the future Q4.

When sheltered housing tenants were asked, "Would you like to move from your current home, if you had the option?" most respondents answered "no" (75.8%; 138/182), others said "maybe" (12.1%; 22/182), or "yes" (12.1%; 22/182). Common reasons for wanting to move (or being unsure) were as follows: wanting to be closer to a town or city center, wanting to move closer to family, insufficient public transport. The main adaptation required for current needs to enable aging-in-place was a walk-in shower and/or grab rails in the bathroom. Extra support anticipated future needs, including improved wheelchair accessibility, stair lift, increased home help, more coffee mornings, or events to combat isolation.

These results are supportive of Hypothesis 2, it is likely that less people in sheltered housing want to move as this housing type is more suited to the needs of older people than standard housing.

The move into sheltered housing. Tenants in sheltered housing were asked an extra set of questions regarding their experience of the move into sheltered housing. Levels of satisfaction following the move were high,

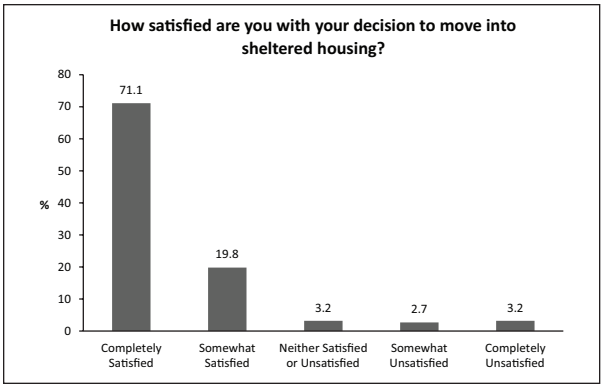


Figure 15. Satisfaction with move into sheltered housing.

71.1% (133/187) of respondents were "completely satisfied," and a further 19.8% were "somewhat satisfied" (Figure 15). Quotes representative of the most common responses are outlined in Table 4. These reflect the previous open-ended comments, with safety and security featuring prominently.

Participants were also given a list of statements and asked to indicate any that they felt represented an "advantage" or a "disadvantage" of living in sheltered housing; the results can be seen in Figures 16 and 17. As can be seen, many more participants endorsed advantages rather than disadvantages. Once again, independent living (n = 171), followed closely by feeling safe and secure (n = 170), was listed as the primary advantages of sheltered housing. The disadvantages included the service charge being considered expensive (n = 57) and being unable to keep a pet (n = 47), a finding which is reflected throughout the open-ended responses in this survey.

Discussion

Well-designed homes, with appropriate supports, can positively impact on the quality of life of older adults and promote independence (Centre for Ageing Research and Development in Ireland, 2013). This research sought to investigate the current housing situation of older people living in social housing, to ask them what they felt their current and anticipated housing and related support needs are, and also to compare the needs of those in standard housing in the community, or in specifically designed sheltered housing.

Overall, the data supported both of our hypotheses:

Hypothesis 1: Overall, most older people will be happy in their social housing.
Hypothesis 2: Within social housing, older people living in sheltered housing will be more satisfied, and report more positive outcomes, than those living in standard housing.

Overall, social housing tenants were very happy with their homes and most people did not want to move

Table 4. Exemplary Quotes From the Question, "Why Were You Satisfied With Your Move to Sheltered Housing?"

Theme	Quotes
Safety and security	"Enjoy feeling safe and secure"
Independence	"Because I have gained independence and security"
	"I live on my own. I am independent yet have friends around me when needed"
Support when needed	"Because of the support and convenience and friendliness. Support from staff. Everything very well kept, clean and bright"
	"Clúid and its employees assist us very well and take a lot of pressure off people on their own. It makes for security and safety"
Friendship/community	"I have made many new friends here"
Meets needs	"There is excellent supervision by our manager of the needs of all of us "oldies" and I feel confident of the future when I need same"
	"It satisfies all my needs in every way"

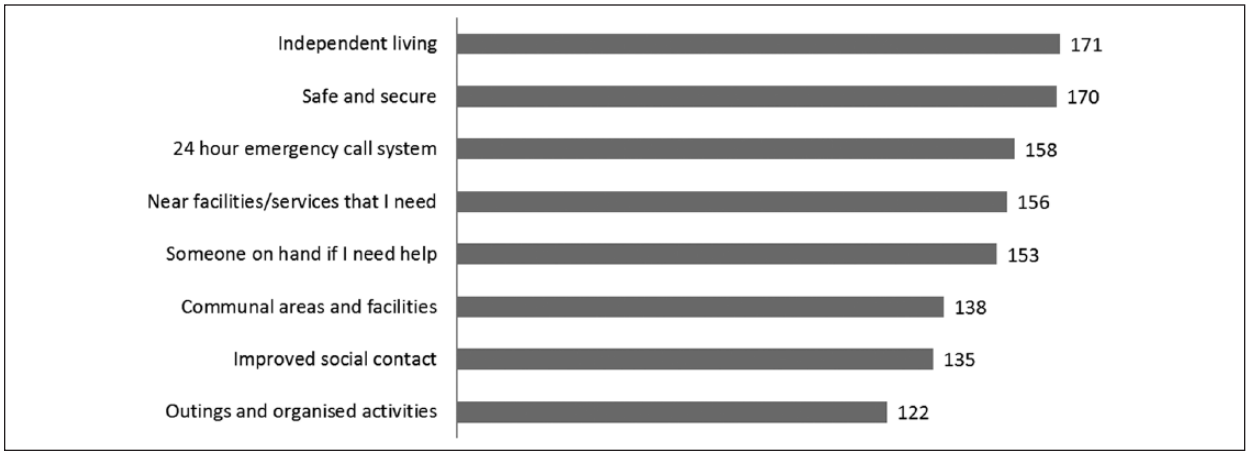


Figure 16. Most commonly endorsed advantages of living in sheltered housing.

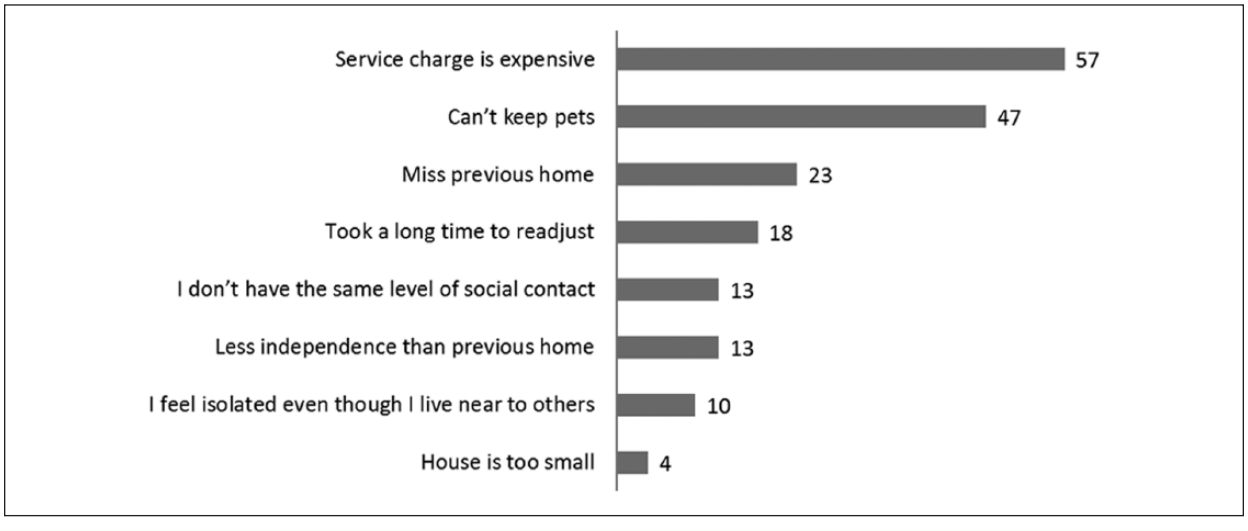


Figure 17. Most commonly endorsed disadvantages of living in sheltered housing.

home. Sheltered housing tenants were happier with their home than standard housing tenants, and a lower proportion expressed an interest in moving home. This reflects previous international research which showed positive outcomes and high levels of satisfaction with their home among sheltered housing tenants (Croucher et al., 2008; Netten et al., 2011; Pannell & Blood, 2012).

There are many factors which may underlie the positive experience of older people in sheltered housing. Tenants in sheltered housing listed independent living,

safety and security, location, improved social contact as the primary advantages. After reviewing the literature, Croucher, Hicks, and Jackson (2006) surmised that it is the combination of independence and security which accounts for the generally high levels of satisfaction among tenants of sheltered housing.

Some disadvantages of sheltered housing as identified by tenants were expensive service charges, not being allowed to keep a pet, and taking a long time to adjust to the move. Few tenants in sheltered housing had private outdoor space; this should be made available wherever possible and be suitable to tenants' needs, for example, a walled patio or small balcony without a step. Where this is not possible, a shared safe outdoor space is crucial, as outdoor space is important to older and less mobile people; it helps combat feelings of loneliness and depression. It is important that future planned sheltered housing designs take these factors into account.

Slightly more standard tenants than sheltered tenants wanted to move; these people primarily wanted to move to other standard social housing and did not consider sheltered housing as an option. Yet paradoxically, compared with tenants in sheltered housing, tenants living in standard were more likely to have an illness or disability, or to be living with someone else so affected; were more worried about being forced to move to a nursing home; were less confident about receiving necessary supports in the future; and felt less safe in their neighborhood. This may to be related to a lack of knowledge about housing and support options, or at least about sheltered housing as an option. Indeed, in this survey, just over a third of tenants in standard housing felt confident that they knew all the options available to them with regard to their housing needs as they get older. This is substantiated in previous research in the north of Ireland (Boyle, 2012) which showed that older people had limited knowledge about sheltered schemes and that there were widely held misperceptions about these schemes such as a loss of freedom and independence. Public information campaigns are needed to empower older people to make the appropriate choices about their own future care and housing options.

Looking at health service utilization, older people in sheltered housing accessed health services such as general practitioner (GP) and public health nurse, more frequently. Yet, this same group self-reported better health status. This may reflect the effect of good services on perceived health. It is possible that the increased safety and better home design/adaptations in sheltered homes contributes to perceived benefits to one's health.

Assistive technology is often considered to have great potential to assist older people to remain living indecently for longer (Cahill et al., 2007). The current results, however, indicate that assistive technologies may not be welcomed by all older people. Although equivalent proportions had access to broadband, more older people living in standard housing would consider using assistive technologies than would sheltered tenants. This suggests that assistive technologies may be more suitable for supporting older people in standard housing whereas local supports such as an on-site warden and alarms are optimal for those in sheltered accommodation.

The results also shed light on our primary research question, which was,

> **Research Question 1:** What do older people living in social housing feel are their main housing, and related, needs?

Older people in both standard and sheltered housing worry the same about moving into a nursing home. This worry was not linked to perceived levels of current or future supports but appears to be a general anxiety that older people may have despite their current circumstance.

Furthermore, older people, irrespective of where they were currently living, had similar housing and related support needs. Home adaptations, critically, adaptations in the bathroom, are necessary to improve the independence and safety of older adults. Unsuitable homes led to fear and anxiety for older people, especially around using the bathroom and stairs. Anxiety around unsuitable homes is consistent with previous Irish research which showed that 27% of people aged 65 to 74 years are "somewhat" or "very" afraid of falling; this figure rises to 40% for those aged 75 years or more (The Irish Longitudinal Study on Ageing [TILDA], 2011). Older people who have minor adaptations to their homes (such as grab rails or handrails) feel safer in their homes and feel that these have a positive impact on their health (Heywood, 2001).

The fact that adaptations were part of the design of all sheltered homes represents a significant advantage of this type of housing for older people. The literature supports the importance of well-designed homes for older people, for example, good quality and well-designed houses reduce the level of admissions into residential care for housing related reasons (The Association of Directors of Adults Social Services [ADASS]/Housing LIN, 2011). Relatedly, a study of older people in residential care in the United Kingdom found that 15% of older people were admitted due to their previous home being considered unsuitable by a social worker (Bebbington, Darton, & Netten, 2001).

Strategic location of homes is important in respect of promoting social integration and contributing to a better quality of life, and the level of support available in the community also affects how long an older person will be able to live at home (Stratton, 2004). Location may be one more factor underpinning the finding of sheltered tenants reporting being happier in their home than standard tenants, as these homes were more likely to be within walking distance of amenities.

There was a relatively high subjective perception of poverty across all older people in social housing, but especially among those in standard housing, which

would be typical of this tenant profile. Expensive service charges were sometimes mentioned as a disadvantage in the open-ended responses. It is important that service charges are reliably means-tested and that tenants are helped with budget and money advice, to avoid issues such as fuel poverty which affected a sizable proportion of this sample and can have a detrimental effect on health.

Limitations

We cannot be sure whether those who responded to the survey are representative of all those who were surveyed, and it might be the case that those who are fitter and abler were more likely to respond. However, we made effort to minimize this potential bias by offering the survey in multiple formats, and those with poor vision, limited reading ability, and so on, could complete the survey over the phone. We also conducted a census of people in sheltered housing and a geographically representative sample of those in standard housing; thus, we have reasonable confidence in the generalizability of our results to the population.

Conclusion

Most older people in both standard social housing and sheltered housing were happy with their current home and did not want to move, supporting the assertion that older people want to age in place. Home adaptations are critical to facilitate this. Future social housing designs should be flexible, that is, adaptable to the needs of the tenants over time. Current homes should be adapted to aging tenants' needs, particularly bathroom, stairs, and entrance ways into the home. Where these adaptations are not provided by the housing association, older people should be guided in the application for these.

Older people living in sheltered accommodation were very happy with their homes, were very satisfied with the move to it, and reported more positive outcomes such as more social contact and better perceived health. Yet, despite high levels of disability among older people living in standard housing, most wanted to stay living in their own home. Further education is needed so that people are aware of their housing options and can make informed decisions about where they would like to live.

Subjective experiences of sheltered housing schemes are overall positive. A key objective of future research should be to ascertain whether sheltered housing can in fact facilitate aging-in-place and whether it mitigates or negates the need to move into residential care, and a cost analysis of this.

Authors' Note

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