

The impact of housing modification: Introduction

Cross-Cultural Comparison of the Impact of Housing Modification/Adaptation¹ for Supporting Older People at Home: An Introduction

Sheila Peace, The Open University, Milton Keynes, UK, and Robin Darton, PSSRU,
University of Kent, UK

ORCID IDs:

Robin Darton: 0000-0002-8242-790X

Sheila Peace: 0000-0002-3293-8082

Address for correspondence:

Sheila Peace BA PhD FAcSS

Emeritus Professor of Social Gerontology

Faculty of Wellbeing, Education and Language Studies

The Open University

Walton Hall, Milton Keynes

MK7 6AA

United Kingdom

Tel: +44 7837 960275

Email: Sheila.Peace@open.ac.uk

Keywords

Housing modification; housing adaptation; international evidence review

¹Both 'modification' and 'adaptation' are used interchangeably across this special issue. The term 'home modification' is used in USA, Australia, and Sweden and 'home adaptation' in the UK and Spain with papers from Sweden using both terms.

Introduction

This special issue focuses on the role of home modification/adaptation in supporting older people living in ordinary community-based accommodation, with the aim of providing cross-cultural perspectives from a number of developed nations (Australia, Spain, Sweden, UK and the USA). As documented, in these countries a majority of people in later life live in mainstream housing, predominantly single-family dwellings, while a minority live in more specialized age-segregated housing with care, or in care or nursing homes. The latter are more common for people in advanced old age. In the US, 75% of older adults are homeowners and only 2% live in an institutional setting; in England over 90% of those aged 65 years or over live in ordinary housing, while in Sweden and Australia 95% of those aged 65 and over live in ordinary housing.

Ordinary housing, while culturally specific, also varies in terms of building age, type, size and tenure. For example, within the European Union (EU), Spain has the highest percentage of people of all ages living in multiple family dwellings or apartments. Older people living in these settings are most likely to be living alone. Such apartment living is also more common in urban Sweden, while those living in rural areas occupy single-family dwellings. The countries included here have faced similar issues in terms of the variation in the age of housing stock and how housing design in the 20th century failed to accommodate the needs of people who experienced accessibility issues due to functional and cognitive health limitations (see Goldsmith, 1997; Park & Porteus, 2018; Struckmeyer & Pickens, 2016 for UK and USA experience).

In mainstream housing, people of all ages have commented on issues of privacy, social relationships, safety, security, comfort and belonging (Mallett, 2004; Rowles & Chaudhury, 2005), albeit acknowledging issues of gender inequalities over roles and power relations (Jupp, Bowlby, Franklin, & Hall, 2019; Peace, 2015). At different points of the life course, many occupants gradually make alterations to their built environment that go beyond decoration to accommodate their physical and social needs, including changes to room layout and domestic equipment. In more recent times this has included the use of digital and assistive technology (Maguire et al., 2014; Pink, Leder Mackley, Morosanu, Mitchell, & Bhamra, 2017). Many older people will have been long-term residents in their homes, and in the possibly 30–40 post-retirement years they may have found that their health and wellbeing gradually changed (Victor, 2010). Where and how a person lives may reveal differences and similarities for younger and older people living with chronic health conditions or disability (Imrie, 2013). Indeed, many older people may not see themselves as disabled, and yet the dwelling in which they live may affect their ability to function (Heywood, 2013; World Health Organization [WHO], 2018). Without a particular health care need, older people may not find themselves referred to a registered occupational therapist who can assess environmental barriers in their housing. Rather, people may either have the skill to ‘do things themselves’ or seek a handyperson service or, in the UK, a Home Improvement Agency (HIA). HIAs advise clients on home improvements and adaptations, help them to apply for grants or loans, help to identify reputable contractors and oversee the work (Department of Communities and Local Government [DCLG], Department of Health [DH], & Department of Work and Pensions [DWP], 2008).

Population aging is recognized throughout the world (WHO, 2002, 2007, 2015), and for older people housing is central to their lifestyle and wellbeing, ideally enhancing how they feel through being familiar and secure, and the context for everyday routines (Peace, 2015). However, particularly in relation to volume building for sale, inclusive housing design that recognizes the need for ergonomic change with age and disability has not been incorporated within building design during the 20th century and into the 21st. The specialized world of self-build has been able to create bespoke housing (at a price) and greater self-building is reported across parts of North Western Europe than in the UK (*The Independent*, 2014). Social housing providers in the UK were the prime movers in the 'lifetime homes' movement. However, with the change of government in 2010 and the policy focus on austerity, there has been limited progress on more accessibly designed housing (DCLG, DH, & DWP, 2008; Park & Porteus, 2018; Habinteg, 2019). It has only been in the past few decades that there has been a gradual recognition of the need to consider home modification/adaptation more widely, as the built environment is recognized as not meeting the needs of population aging, alongside responding to climate change, for example by investing in diverse energy capture (see Adams & Hodges, 2018; Lewis, 2015).

What then is the baseline for discussing such modification or adaptation? These rather discouraging comments were made at the beginning of this decade:

'Evidence about the effectiveness of housing adaptations is unsystematic, leaving large gaps in knowledge. The evidence that exists is not sufficiently compelling to

attract substantial investment, and its weakness impedes evidence-based practice.'

(Heywood & Awang, 2011, p. 200)

Frances Heywood and Darren Awang from the UK made this statement in 2011 as part of a call to develop the research evidence concerning the value of housing adaptation to support the health and wellbeing of older people and people with disabilities. They drew upon a review of international English language literature undertaken for the British Office for Disability Issues (Heywood & Turner, 2007), plus additional literature searches (Awang, 2004; Heaton & Bamford, 2001). At that time, they found both small-scale research, often based on post-graduate projects drawing on diverse methodologies, and a limited number of larger studies (Cornillon et al., 2002; Mann, Ottenbacher, Fraas, Tomita, & Granger, 1999; Mountain, 2000; Nikolaus & Bach, 2003; Plautz, Beck, Selmar, & Radetsky, 1996). Across this body of work, research was seen to lack comparability due to a variation in focus, which limited the evidence base. Nevertheless, Heywood and Awang commented on how these studies brought housing and health together, crossing disciplines that included medical, occupational therapist and social researchers.

To date, then, there have been variations in methodological approaches, and a diversity in the validation of measurement tools and outcomes relating to the influence of environmental change within the home. There has been a failure to incorporate disciplines such as health economics; to examine the influence of housing modification on the lives of carers alongside service users; and to examine the relationship between the organization of service delivery and the installation of the modification. Research outcomes have been either collective/policy focused or

The impact of housing modification: Introduction

individualized, and this has led to a lack of comparability, reducing the impact of findings showing the need for home modifications for people in specific circumstances. Other methodological issues concern the timing of research, the potential for 'before and after' studies and randomized controlled trials, and the lack of longitudinal research regarding personal experience.

Almost a decade has passed since these thoughts and reflections took place. In raising this gap in our knowledge concerning housing and health for people with disabilities, the majority of whom are older people, Heywood and Awang (2011) outlined areas for continuing debate suggesting an international *housing adaptation genome* project (subsequently the genHOME project). This led to a UK meeting in 2016 where all authors of this special issue were represented. Subsequently, a Symposium convened and accepted by the International Association of Gerontology and Geriatrics (IAGG), World Congress, San Francisco, 2017 produced the papers presented here and the thematic discussion which follows.

Acknowledgement

The authors would like to thank all the IAGG authors and Dr Rachel Russell (national lead on the genHOME project), School of Health and Society, University of Salford, Salford, Manchester, UK, for reviewing and commenting on the Introduction and Discussion of this Special Issue.

(1290 words)

References

- Adams, S., & Hodges, M. (2018). *Adapting for ageing: Good practice and innovation in home adaptations*. London: Centre for Ageing Better.
- Awang, D. (2004). *Building in evidence: Reviewing housing and occupational therapy*. London: College of Occupational Therapists.
- Cornillon, E., Blanchon, M., Ramboatsisetraina, P., Braize, C., Beauchet, O., Dubost, V., ... Gonthier, R. (2002). Effectiveness of falls prevention strategies for elderly subjects who live in the community with performance assessment of physical activities (before-after). *Annales de Readaptation et de Médecine Physique*, 45(9), 493–504.
- Department for Communities and Local Government [DCLG], Department of Health [DH], & Department for Work and Pensions [DWP]. (2008). *Lifetime homes, lifetime neighbourhoods: A national strategy for housing in an ageing society*. London: Department for Communities and Local Government.
- Goldsmith, S. (1997). *Designing for the disabled: The new paradigm* (4th ed.). First published 1997, eBook 2012. Oxford: Architectural Press.
- Habinteg. (2019). See <https://www.habinteg.org.uk/policy-blog/housing-plans-risk-accessible-homes-crisis-for-england-says-new-research-1285>
- Heaton, J., & Bamford, C. (2001). Assessing the outcomes of equipment and adaptations: Issues and approaches. *British Journal of Occupational Therapy*, 64(7), 346–56.
- Heywood, F. (2013). Adaptation: Altering the house to restore the home. *Housing Studies*, 20(4), 531–47.
- Heywood, F., & Awang, D. (2011). Developing a housing adaptation genome project. *British Journal of Occupational Therapy*, 74(4), 200–203.

- Heywood, F., & Turner, L. (2007). *Better outcomes, lower costs. Implications for health and social care budgets of investment in housing adaptations, improvements and equipment: A review of the evidence*. London: Department for Work and Pensions.
- Imrie, R. (2013). Disability, embodiment and the meaning of home. *Housing Studies*, 19(5), 745–763.
- Jupp, E., Bowlby, S., Franklin, J., & Hall, S. M. (2019). *The new politics of home*. Bristol: Policy Press Shorts Research.
- Lewis, A. (2015). *Maximising the benefits of Passivhaus: A guide to supporting older occupants* (Report). Manchester: University of Manchester.
- Maguire, M., Peace, S., Nicolle, C., Marshall, R., Sims, R., Percival, J., & Lawton, C. (2014). Kitchen living in later life: Exploring ergonomic problems, coping strategies and design solutions. *International Journal of Design*, 8(1), 73–91.
- Mallett, S. (2004). Understanding home: A critical review of the literature. *The Sociological Review*, 52(1), 62–89.
- Mann, W. C., Ottenbacher, K. J., Fraas, L., Tomita, M., & Granger, C. V. (1999). Effectiveness of assistive technology and environmental interventions in maintaining independence and reducing home care costs for the frail elderly: A randomized controlled trial. *Archives of Family Medicine*, 8(3), 210–217.
- Mountain, G. (2000). *Occupational therapy in social services departments: A review of the literature*. London: College of Occupational Therapists with the Centre for Evidence Based Social Services, University of Leeds.
- Nikolaus, T., & Bach, M. (2003). Preventing falls in community-dwelling frail older people using a home intervention team. *Journal of the American Geriatrics Society*, 51(3), 300–305.

The impact of housing modification: Introduction

Park, J., & Porteus, J. (2018). *Age-friendly housing: Future design for older people*.

London: RIBA Publishing.

Peace, S. (2015). Meaning of home and age. In J. Twigg & W. Martin (Eds.),

Routledge handbook of cultural gerontology (pp. 447–454). London: Routledge.

Pink, S., Leder Mackley, K., Morosanu, R., Mitchell, V., & Bhamra, T. (2017). *Making*

homes: Ethnography and design. London/New York: Bloomsbury Academic.

Plautz, B., Beck, D. E., Selmar, C., & Radetsky, M. (1996). Modifying the

environment: A community-based injury-reduction program for elderly

residents. *Research Linkages between Academia and Public Health Practice*,

supplement to *American Journal of Preventive Medicine*, 12(4), 33–38.

Rowles, G. D., & Chaudhury, H. (Eds.). (2005). *Home and identity in late life:*

International perspectives. New York: Springer Publishing Company, Inc.

Struckmeyer, L. R. & Pickens, N. D. (2016). Home modifications for people with

Alzheimer's disease: A scoping review. *American Journal of Occupational*

Therapy, 70(1), 7001270020p1–7001270020p9. doi: 10.5014/ajot.2015.016089

The Independent. (2014, March 25). Self-build Britain: Is the UK lagging behind other

countries? (accessed August 2019)

Victor, C. R. (2010). *Ageing, health and care*. Bristol: The Policy Press.

World Health Organization [WHO]. (2002). *Active ageing: A policy framework*.

Geneva: WHO.

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

WHO.

World Health Organization [WHO]. (2015). *World report on housing and health*.

Geneva: WHO.

The impact of housing modification: Introduction

World Health Organization [WHO]. (2018). *WHO housing and health guidelines*.

Geneva: WHO.

(682 words)