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Mobility and well-being in later life

Co-Motion

HOW CAN THE BUILT ENVIRONMENT BETTER SUPPORT MOBILITY AND WELL-BEING IN LATER LIFE?

Summary of key findings for Leeds

EPSRC
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Newcastle University

northumbria UNIVERSITY NEWCASTLE

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Photo1:Photograph©iStock.com/Co-Mo

Photo 2: Co-Motion

Background

Co-Motion was a three and a half year study. It investigated the links between mobility and well-being amongst older people going through critical but common life changes. A focus for the research was on complements or alternatives to physical design or redesign of the built environment, which could be personalised to individual needs. This summary highlights some of the main messages from the project on how the built environment might better support mobility and well-being in later life. Other outputs are available at: www.york.ac.uk/co-motion. Further findings and outputs from the project will be published in the coming months.

Our approach

Ninety-six people aged 55 and over took part in a longitudinal study that explored their mobility and well-being over time as they experienced one or more critical but common life changes. They lived in one of three locations - Leeds, Hexham, or York.

Other people aged 55 and over also took part in workshops and events. Local and national stakeholders were also interviewed to explore their views on supporting mobility and well-being in later life. These stakeholders included local authorities, voluntary sector organisations, community groups and national non-government organisations.

A range of workshops with our participants and stakeholder organisations explored specific aspects of mobility, such as:

- how people adapt when they give up, or reduce, driving;

- changing behaviour in public places to make them easier and friendlier for older people, and for people of all ages with different types of health problems or impairments; and
- promoting urban walking for well-being through co-design workshops with older people to develop a mobility navigation app. These co-design workshops also drew on a photo study by older people to record aspects of their journeys and things that affect their travels.

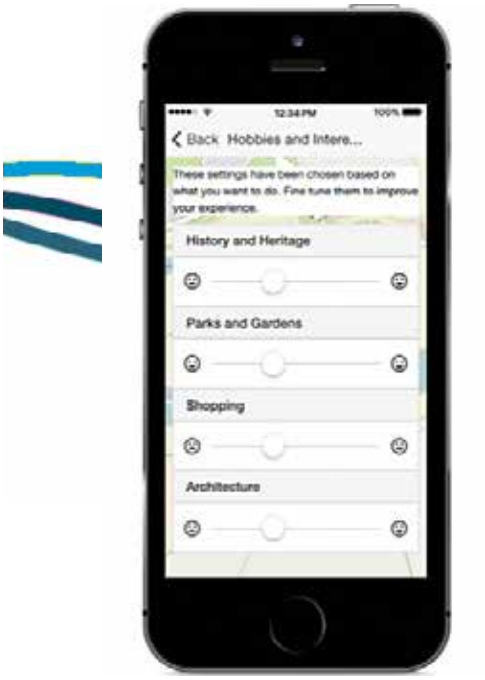


Photo 3: Co-Motion

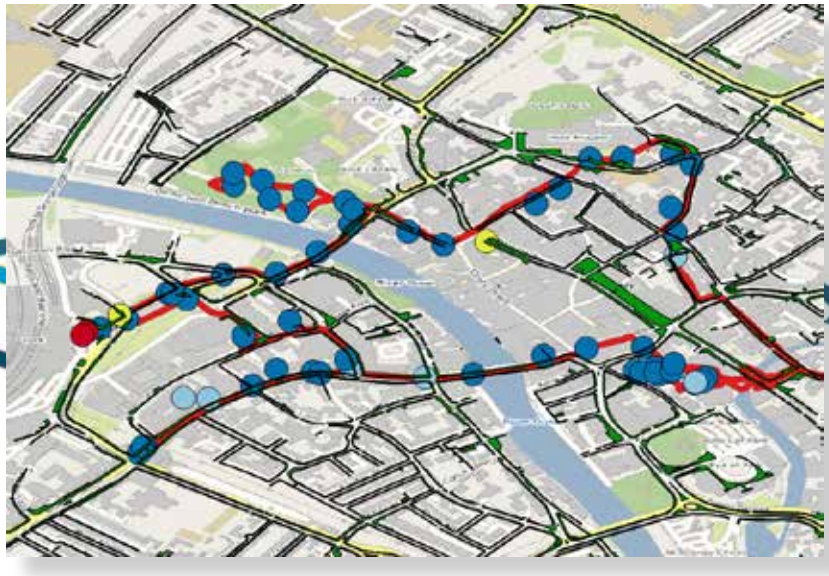


Photo 4: Co-Motion

The project also used Participatory Geographical Information Systems (GIS) to map journeys taken by older people in the three study areas. The aims were to identify both positive and negative aspects of the environment that influence mobility, and engage with wider groups to identify opinions and views on key potential changes to the design or regulation of the built environment. This part of the study also included people who use mobility scooters.

Main messages for policy and practice from the research

Across all elements of the Co-Motion project, the participants described hugely diverse experiences of being mobile as part of their daily lives. However, virtually all emphasised the importance of being out and about. The following points do not reflect the needs of all the people who took part in our study, but highlight some of the key areas of concern that were identified in the study areas.

Setting priorities for action in Leeds

Participants in Leeds described some of the barriers and challenges they faced when they were out and about around the city. Some of these issues included:

Photo 5: Co-Motion

- difficulties with public transport connections between rail and buses, and also frequency of buses, especially in the evenings;
- problems with pavements (maintenance, trip hazards/uneven surfaces, and specific locations where there is no footway by the side of roads (e.g. Moortown);
- not enough facilities such as the availability of toilets and places to rest;
- difficulties getting past cars that are parked on pavements, and also com ments about neighbourhoods that are divided by busy main roads which are difficult to cross.

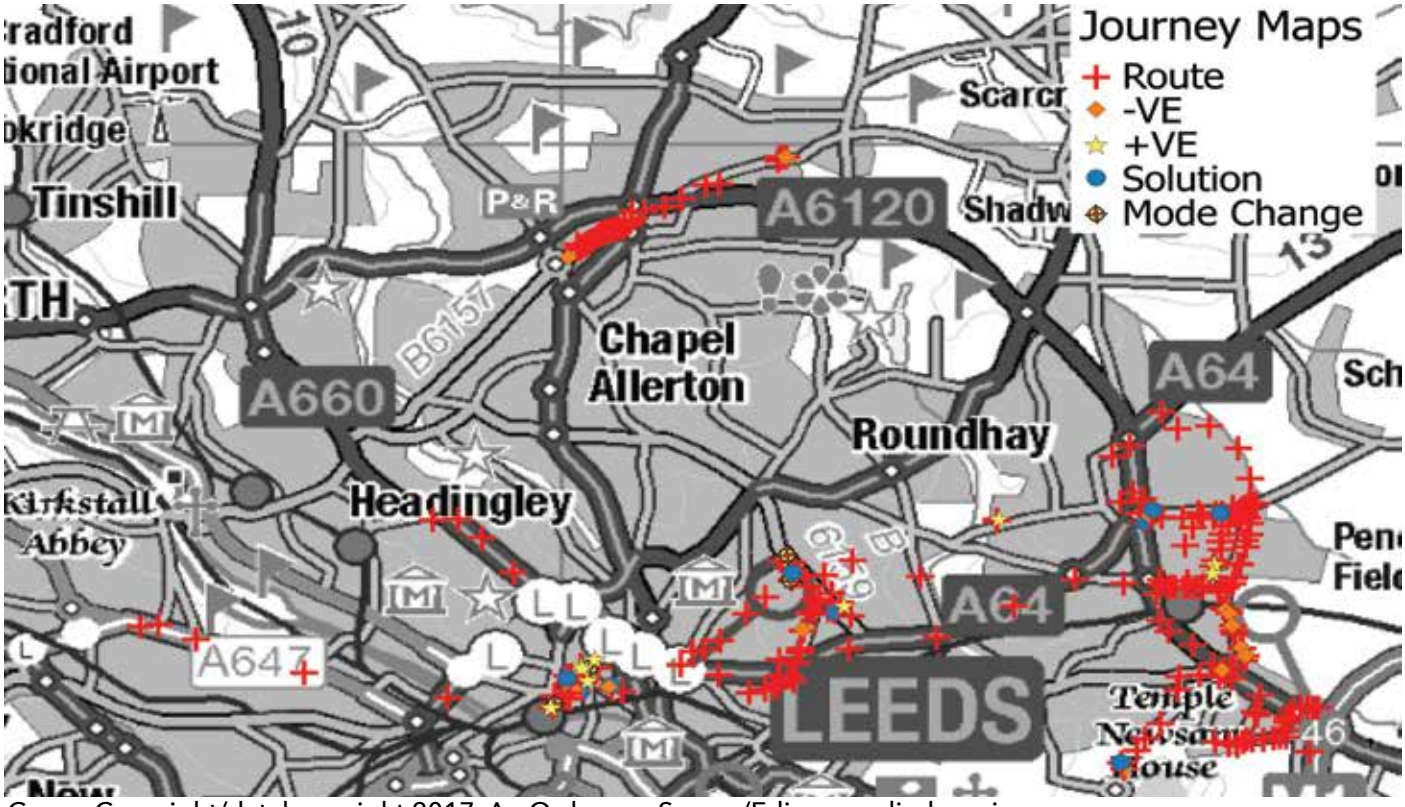
There were mixed views on the adequacy of dropped curbs across the city – re-ports that some areas were well served, but others much less so (but also a need for visual contrasts/use of colour on marked curb or step edges).

Participants in Leeds also commented on:

- levels of pollution on health (air quality/electrosensitivity[1]);
- feeling unsafe either within own neighbourhood or the city centre (especially in the evenings/in the dark).

Indeed, the city centre was generally not very popular as a destination, with parking, the type of shops, and anti-social behaviour all highlighted as reasons which put people off. Instead there was a greater focus on smaller local retail centres – either shopping malls or town/neighbourhood centres as places to visit.

We also mapped the journeys taken by a number of participants (marked in red crosses on the map below). These participants identified some of the specific places in Leeds where there were positive features (+VE Locations), as well as locations where they experienced difficulties or problems (-VE Locations).



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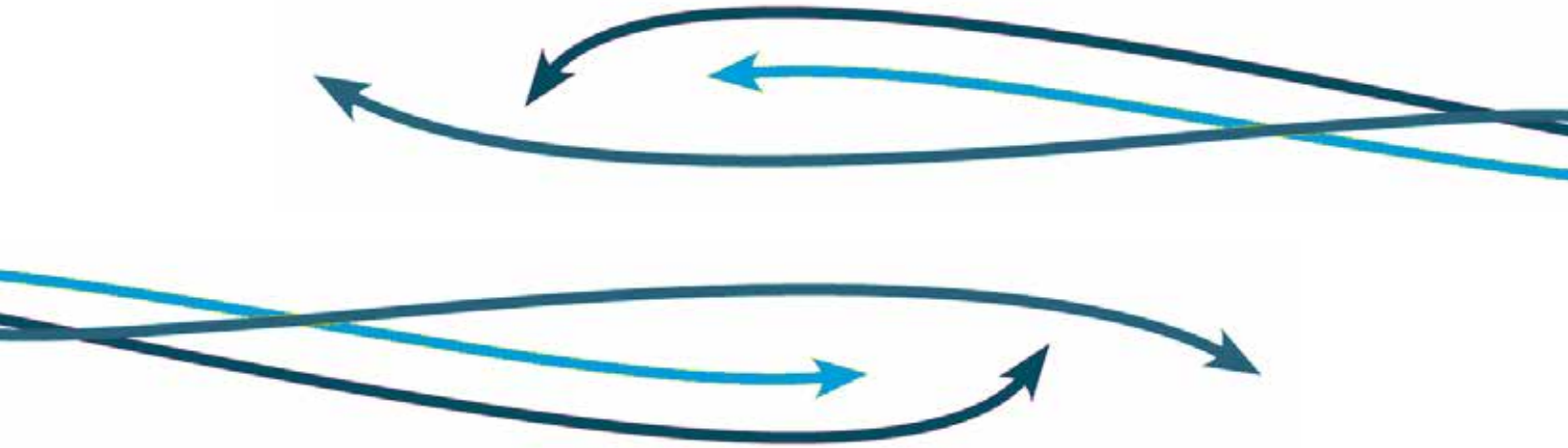
1Electrosenstivity (ES) is a condition which can develop when people are exposed to things like computers, cordless phones, low energy lighting, mobile phones, mobile phone masts, powerlines, smart meters, substations and WiFi.

The locations on the map where participants identified problems included a mixture of physical infrastructure challenges (poor pavement surfaces, or absence of road crossing points); problems related to behaviour of other people (such as parking on pavements, inconsiderate use of shared footpaths); and other issues such as traffic congestion and air pollution.

Participants also discussed possible solutions to the challenges they had identified. Six potential priorities for action in Leeds included:

1. More seating in city centre & shopping centres
2. Ban parking on pavements
3. More pedestrian crossings in areas with high density of older people
4. Improve pavement surfaces in city centre
5. Toilet availability
6. Run buses to parks – allowing older people to access recreation areas



To help identify how far these solutions might be supported by a wider cross section of local people – or whether they would bring unexpected problems or additional benefits, over 84 residents in Leeds took part in an online survey or via a pop up stall on Kirkgate market. The top three solutions to emerge were:

1st - Improve pavement surfaces, including making them less slippery in the city centre
2nd - Ban parking on pavements across the city
3rd - More seating in the city centre and shopping centres

Barriers and challenges in the built environment across the three study areas

Participants in the two other areas, Hexham and York, also described a similar range of issues, and also gave detailed comments on specific issues about living in these two cities. Some of the issues are outlined below:

- Many public and private buildings were considered to be inaccessible to people with a diverse range of conditions or impairments (for example, absence of ramps, heavy doors that need to be opened manually; poor circulation space, or lack of places to rest). Again, this appeared to reflect attitudes as well as awareness of needs.
- The physical inaccessibility of some public spaces meant that some people were effectively unable to participate in some events and experiences (an example given in the research was participating in jury service because insufficient attention had been paid to how a disabled person could attend). There was a lack of toilet facilities generally that are open to the general public, but especially "accessible" toilets suitable for people who use mobility aids or need assistance.
- Design solutions often too narrowly focused on wheelchair friendly design with less awareness among policy makers or members of the public of the needs of people with less visible or obvious impairment (hearing loss being one example).

- Meeting the needs of one group through design features can cause issues for others. Physical modifications intended to help key groups (such as tactile surfaces) or to moderate behaviour (for example speed humps on roads) were noted as causing difficulties for some respondents with physical impairments or conditions.

Signposting routes that meet diverse needs – developing a 'walking for well-being' app2

One way of enabling a more effective use of the current built environment is by highlighting different routes that meet the needs of diverse users. The development of the 'walking for well-being' app is underpinned by this principle. However, in order for technologies like smartphones and tablet computers to help support older people it is crucial that they are involved in all stages of their design.

Photo 6: freestocks.org under License CC0

As a first step, twenty six people, aged 55 to 84 years, volunteered to take part in a pilot photo study. They were given disposable cameras to take on any trips they made over two weeks. They were asked to take photos of things that affect their travel and well-being, in both negative and positive ways. Using the results of the photo study, we developed a number of ideas for mobile applications which might help older people negotiate the built environment and promote their physical activity and well-being.

2 An app - or application - is typically a small, specialised program that can be downloaded onto mobile devices such as smartphones or tablets.

To explore these ideas with older people we then held a number of workshops. On the basis of the workshops, we developed a 'walking for well-being' app for smartphones. The 'walking for well-being' app allows older adults to plan walking routes in their local area. The routes calculated by the application are tailored to suit the needs, preferences, and interests of the individual user. We then organised demonstrations of the application with four groups of older people, aged from 56 to 82 years - a total of 14 people. Participants used the app to a find a route from their current location at the University of York to York Minster, via a local pharmacy.

Photo 7: Co-Motion

Transport options

Cars, where available, were often being used not only for mundane journeys such as shopping but also to help support loved ones or to help friends who were no longer driving to get out and about. The experience of giving up driving was a highly varied one with some participants expressing feelings of lost independence. Those who gave up or were reducing their driving used different modes to get out and about, from travelling by bus and taxi, getting lifts or walking. The mix of which modes people used was highly dependent on financial, social and locational resources. For some participants giving up driving was symptomatic of wider changes in their lives often linked to diminishing sight or sudden health reversal. Discussions with research participants who had recently stopped driving highlighted not only practical issues in making the transition to giving up driving, but also deeper emotional and existential considerations.

Whilst current guides and reviews in the UK provide positive and constructive guidance for older people on giving up driving there may be room for a guide that explores the emotive process of giving up driving and the experiences that people have gone through, including the impact of significant changes in health that may trigger driving cessation. One example of a current guide can be accessed at:

http://www.ilcuk.org.uk/index.php/publications/
and then searching in the 2011 archive.

Photo 8: Co-Motion

Despite concerns about frequency and reliability, bus travel was higly valued, with the free bus pass flagged as an important resource for people. Some participants, however, highlighted a need for flexible transport options, perhaps because of the limited public transport opportunities where they lived, or the nature of their personal mobility issues. Buses that stop on request, and taxis were noted as important options, but door to door services provided by community and voluntary sectors were a key resource that could be encouraged and supported more strongly through policy.

Photo 9: Co-Motion

Mobility scooter users

Detailed work with a sub-group of mobility scooter users enabled research participants to map and describe their experiences, and highlight the effectiveness of design features within the built environment.

This pilot study took place in Leeds and York and used a novel approach by mounting sensors on-board mobility scooters. These sensors identified the physical and environmental characteristics and other associated issues faced by mobility scooter users. The sensors also gave users the chance to record their own experiences by recording their comments whilst on the journeys and via an online survey at the end of their trips.

Photo 10: Co-Motion

Ten participants took part in this study and 25 journeys were recorded across the two cities. The pilot study identified a number of key areas of future research into improvements to urban planning as well as possible mobility scooter design improvements to help improve well-being and mobility among scooter users (such as additional safety features on speeds and tilt, and mapping 'safe' routes for mobility scooter users).

Care on the move

Having someone to 'travel with' was crucial for some participants, especially when the nature of their condition or impairment made sharing a journey with others essential. Although in our research it was families and friends who provided a key role here, there is also a wider role for volunteers to act as 'travel buddies'.

Many journeys were being made in order to give care and support to others. Journeys were being made by people participating in formal volunteering, as well as those offering informal support to partners, wider family members (including childcare, or for older parents), friends, neighbours, colleagues and others.

One policy implication is the extent to which transport planning sufficiently recognises public transportation, and travel infrastructure such as stations, as places where care and support is taking place. The same policy implication relates to the wider planning of the built environment. This conclusion links with recent calls for the development of carer friendly communities by national organisations who represent the needs of carers. For more information about this please visit

http://www.carersuk.org/for-professionals/policy/policy-library/

building-carer-friendly-communities-research-report-for-carers-week-2016

Photo 11: Photograph©iStock.com/Co-Mo

Raising awareness of the needs of older and disabled people in public spaces

Discussions with the research participants highlighted how attitudes and behaviours amongst service providers and the wider public can have an impact on people's experiences of being out and about.

One issue was how people's actions can create physical barriers for others. That is, the physical design of public places, including universal design features that are intended to help make places more accessible, can be compromised by the actions of other users. Some of the problems that participants discussed included:

- parking on pavements;
- parking across dropped curbs;
- putting advertising boards on public footways.

Secondly, some participants described a lack of tolerance or awareness of their needs amongst service providers and the general public that had a significant reported impact on their confidence and ability to get out and about. For example, negotiating a seat on public transport, or being the focus of negative attitudes or comments erodes confidence and creates anxiety.

One way of tackling this issue is the use of techniques to raise awareness amongst the general public and service providers of the needs of different people. There are a number of examples of this type of approach, often relating to public transport such as 'Better Journey' cards, or the trial by Transport for London of the new 'Please offer me a seat' badge and card to address hidden needs from September 2016. More information on this can be accessed at:

https://tfl.gov.uk/campaign/please-offer-me-a-seat

Other examples include awareness raising of the needs of people who live with dementia, as part of the development of "dementia friendly communities" in various localities across the country. More information on this can be accessed at:

http://dementiawithoutwalls.org.uk/dementia-friendly-communities/

Our project has developed a local approach to awareness raising by working with the poet Anna Woodford, who has written a sequence of poems on mobility in later life. These poems have featured inside First York buses around the city during January 2017. We hope that people will enjoy reading the poems, as well as highlighting the travel needs of fellow passengers. Read more about this at:

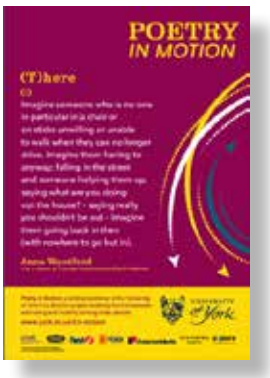


Photo 12: Co-Motion

https://www.york.ac.uk/chp/expertise/co-motion/poetry-in-motion/

These specific examples highlight a principle that could be taken further by policy and practice. Just as physical environments can be disabling, so can attitudes and behaviours, and there needs to be greater attention to this issue with respect to creating inclusive environments for all ages. Although our evidence is drawn from people in later life, this conclusion is relevant for all ages.

About this study

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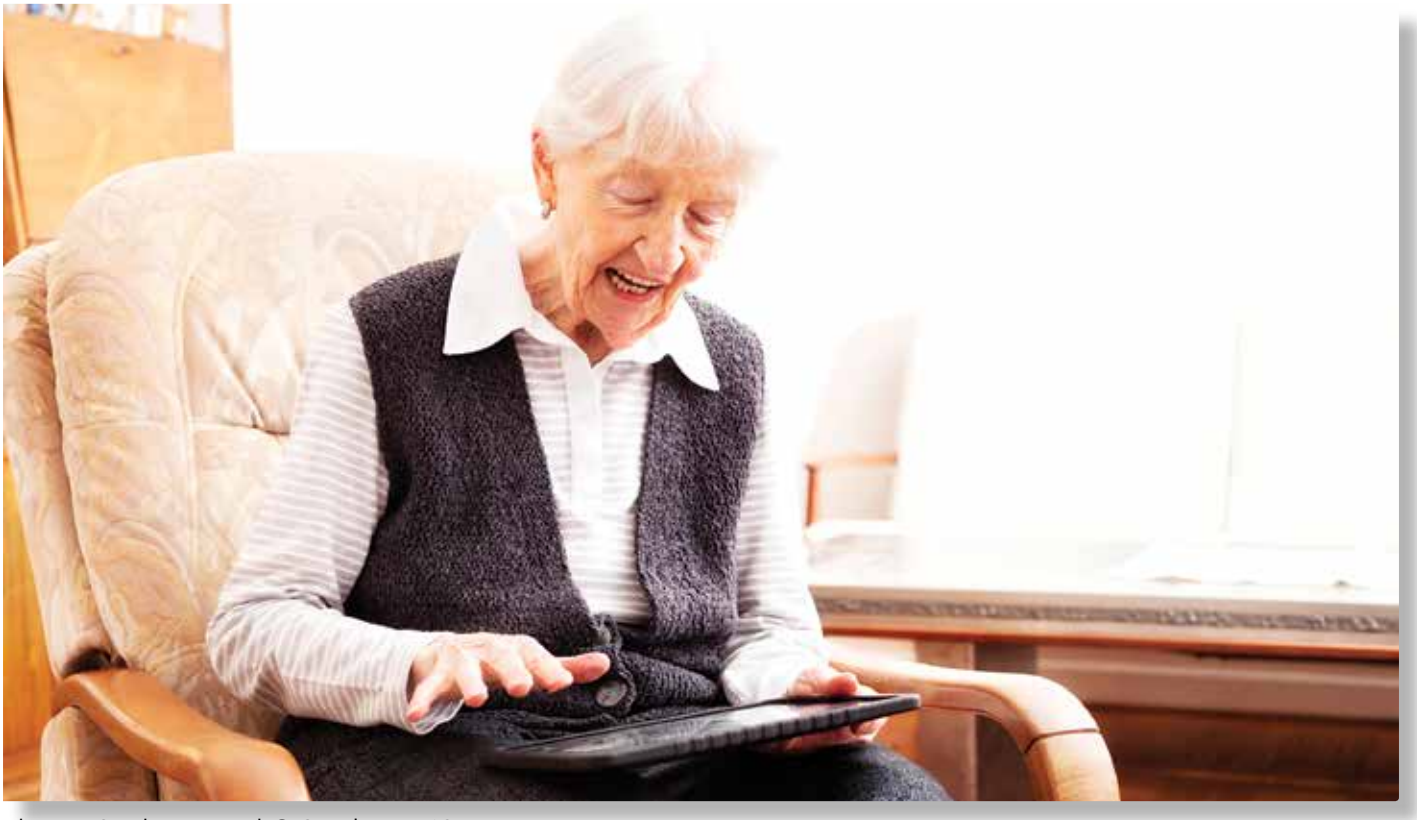

Photo 13: Photograph©iStock.com/Co-Mo

The research consortium was led by the Centre for Housing Policy at the University of York. The consortium included the following departments and partners:

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Newcastle University	Northumbria University	Bradford Institute for Health Research	University of Leeds
School of Architecture, Planning & Landscape	*Department of Psychology*	*Born in Bradford Research Team*	*Institute for Transport Studies*
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