

Institution: The University of Edinburgh (UoE) & Heriot-Watt University (HWU)

Unit of Assessment: 16 Architecture, Built Environment and Planning

Title of case study: 6: Adding quality years to later life through interdisciplinary research linking built environment, health and wellbeing

1. Summary of the impact

By 2050, there will be 2 billion people in the world aged 60 or over. Award-winning research has provided new evidence that maintaining health and mobility in this ageing population is related to easy and enjoyable access to outdoor environments. This is crucial for combatting social isolation and physical inactivity, the latter being the fourth greatest risk to global mortality. Described by [text removed for publication] the All-Party Group on Intergenerational Futures as "phenomenally exciting", the research has stimulated better planning for healthy environments, using a network of c.40 non-academic partners to influence policy within the Scottish, UK and Japanese governments and in the European parliament. It has been used in training for over 1,000 industry professionals, in campaigns by major charities and in guidance by the World Health Organization.

2. Underpinning research

Older people who don't find it easy or enjoyable to get outdoors can spiral into poor physical health, less social contact and a reduced quality of life overall, increasing demand on health and social care services. However, until 2003, when the Inclusive Design for Getting Outdoors (I'DGO) project was established, little research had explored the relationship between good outdoor access for older people and healthier, more independent, active living into oldest age. This Engineering and Physical Sciences Research Council (EPSRC) funded study provided the first empirically robust UK evidence of the impacts on older people's health and wellbeing of restricting access to outdoor environments. In 2006, the consortium delivering the project was awarded further EPSRC funding to carry out a second phase of research and, in 2009, the Director, Catharine Ward Thompson, became a Co-Investigator of the EPSRC's knowledge transfer consortium on ageing, KT-EQUAL.

The I'DGO consortium consisted of Alliance researchers, together with colleagues at the Universities of Salford and Oxford Brookes. The Principal Investigator and Consortium Director for the first project, I'DGO 1, was Prof Catharine Ward Thompson (1981-present), Director of the OPENspace research centre, with Prof Peter Aspinall (1974 – present), as Co-Investigator and Dr Takemi Sugiyama (2003-2006) and Dr Susana Alves (2006-2011) as Research Associates. For the second phase, I'DGO TOO, Ward Thompson remained as Director, Aspinall as Co-Investigator and Alves as Research Associate (until June 2011), joined by Prof Archie Young (Geriatric Medicine 1998-2007, now Emeritus Professor) as Co-Investigator. Academic partners were as before, although the Oxford Brookes team moved to the University of Warwick mid-2009.

The I'DGO research led by the Alliance team provided statistically sound evidence on characteristics of neighbourhood open space and access to it that were associated with healthy levels of physical activity, particularly walking, in older people. It demonstrated what aspects of environmental design support walking for leisure and pleasure as opposed to walking for transport – a key distinction for understanding physical activity in old age. It indicated what qualities of the local environment predict whether older people achieve recommended healthy levels of physical activity and what aspects are associated with life satisfaction or quality of life, as opposed to physical activity. Such findings have provided evidence of direct relevance to government indicators of health and wellbeing in our ageing society.

I'DGO's mixed methods approach included questionnaire surveys, focus groups, activity diaries and monitoring, literature reviews, street audits and behavioural observations. In the first phase, Alliance researchers surveyed older people about their wellbeing and quality of life, how often and why they went outdoors and what features of their local neighbourhood helped or hindered their activity. Among other insights the research found that, if older participants lived in a 'supportive'



environment (e.g. with good quality and attractive footpaths to their local open space, ideally within 10 minutes' walk), they were twice as likely to achieve recommended levels of physical activity - 2.5 hours walking per week.

The second phase of research, I'DGO TOO, focused on specific aspects of placemaking which were gaining currency in policy and practice but which had not yet been tested for age-friendliness. In particular, Alliance researchers focused on interventions to make residential streets more pedestrian-friendly, asking if such environmental changes affected the social and physical activity patterns of older residents. The study found that, while measures to make nearby streets less carcentric improved older people's perception of usability and safety, such changes did not have as much impact on wellbeing, social engagement and quality of life as environmental factors on a wider, neighbourhood scale, such as accessible open space. The I'DGO TOO findings were reported in Europe House in April 2012, in the parliaments of Scotland, Wales and Northern Ireland in May 2012 and in the European Parliament, Brussels, in March 2013.

3. References to the research

Publications

Aspinall, P.A, Ward Thompson, C., Alves, S., et al., R. 2010 'Preference and relative importance for environmental attributes of neighbourhood open space in older people'. *Environment and Planning B: Planning and Design* 37(6): 1022 – 1039, http://dx.doi.org/doi:10.1068/b36024

Sugiyama, T., Ward Thompson, C. and Alves, S. 2009 'Associations between neighborhood open space attributes and quality of life for older people in Britain'. *Environment and Behavior*, 41(1), 3-21, http://dx.doi.org/doi:10.1177/0013916507311688

Sugiyama, T. & Ward Thompson, C. 2008. 'Associations between characteristics of neighbourhood open space and older people's walking'. Urban Forestry & Urban Greening 7(1), 41-51, http://dx.doi.org/doi:10.1016/j.ufug.2007.12.002

Sugiyama, T. & Ward Thompson, C. 2007 'Older people's health, outdoor activity and supportiveness of neighbourhood environments'. *Landscape and Urban Planning* 83, 168–175, http://dx.doi.org/doi:10.1016/j.landurbplan.2007.04.002

Sugiyama, T. & Ward Thompson, C. 2007 'Measuring the Quality of the Outdoor Environment Relevant to Older People's Lives'. In Ward Thompson, C. and Travlou, P. (eds) *Open Space: People Space*. Abingdon, UK: Taylor and Francis, 153-162, ISBN 9780415415347

Funding

Inclusive Design for Getting Outdoors (I'DGO) was funded in 2003 by the Engineering and Physical Sciences Research Council (EPSRC) (GR/S29102/01), under the fourth round of the Council's Extending Quality Life (EQUAL) initiative. Of the total of £560,000, £232,000 was awarded to Alliance researchers (Ward Thompson, PI). In 2007, under the fifth round of EQUAL, EPSRC awarded the consortium £1.6M for I'DGO TOO (EP/D079861/1). The Alliance was awarded £844,000 and Ward Thompson was again PI and Consortium Director.

4. Details of the impact

With estimates of a 70% increase in the number of people in the EU aged 65 or over by 2050, the needs and challenges of an ageing population are of increasing importance to all tiers of government and the private and charity sectors. Inclusive Design for Getting Outdoors (I'DGO) has engaged and impacted on a diverse range of users across all these sectors, primarily through its pool of non-academic partners totalling 37 organisations and two independent consultants. One partner, a transport planner, has said "the project has been very useful in opening up dialogue [and] encouraging debate in a wide range of policy areas; planning, design, transport and health and [engendering] a better understanding of how they all fit together". One example is Ward Thompson's contribution, by invitation, to a Public Health Workshop on Physical Activity by the Department of Health's Chief Medical Officer in 2012 during which she briefed multiple policy teams in Westminster on I'DGO research findings.

In its guide to age-friendly placemaking, Lifetime Neighbourhoods (2011; see 5.1, below), the



Department for Communities and Local Government (DCLG) describes l'DGO as "a very significant source of research and guidance". It suggests that local government and resident-led groups should regularly check the l'DGO website for new evidence and describes the Alliance work on green space, in particular, as a "seminal" part of an evidence base which "has led to valuable developments in terms of links between health commissioning and planning". The free l'DGO guidance it cites, on open space and street design, is one of only two such sources referenced in the World Health Organization's Global Age-Friendly Cities: A Guide (2007; see 5.2). Impact arising from this includes in-depth collaboration with strategists developing the WHO age-friendly cities of Edinburgh and Manchester, the provision of advice to the Cabinet Office of Japan on its FutureCity initiative (2012-2013; see 5.3) and work with the EU-funded SaMERU - Safer Mobility for Elderly Road Users project (including citation in its Final Technical Report).

Like DCLG, the Scottish Government has been a highly proactive partner in I'DGO research. In the last three years, it has asked for, and reflected, I'DGO evidence and opinion in two policies in particular. In *Designing Streets: A Policy Statement for Scotland* (2010; see 5.4), we specifically asked that the Government make clear that streets are of benefit as destinations in their own right. The published policy states that "Scotland's best streets provide some of the most valuable social spaces that we possess" and asks for planners to recognise that "Pedestrians may be walking with purpose or engaging in other activities such as play, socialising, shopping or just sitting".

When preparing its new policy on architecture and placemaking for Scotland, the Government again invited I'DGO to contribute. In our response, we stressed that inclusive design could promote integration and coordination between polices covering the built environment, health and social care and economic growth (see 5.5). This is emphasised in the final Policy, published in June 2013 as *Creating Places*, where the Cabinet Secretary for Culture and External Affairs writes, "*In a challenging economic climate, we should not question whether we can afford to deliver good design. Instead, we should ask, can we afford not to? Whether it is by supporting active, healthy lifestyles, or reducing our carbon footprint, or being the critical factor which attracts visitors and inward investment, the value of place cannot be underestimated or ignored". In addition, Ward Thompson was invited to share I'DGO research during a targeted consultation on inclusive access as part of this Policy's development phase and has since been invited to join the group developing the Government's Scottish National Walking Strategy (2013).*

In October 2009, I'DGO was invited to participate in the pan-European AENEAS (Attaining Energy-Efficient Mobility in an Ageing Society) project, established under the Intelligent Energy Europe programme. Given at a training workshop on *Walking and Traffic Safety in an Ageing Society* in Donostia-San Sebastián, Spain, Ward Thompson's I'DGO presentation was rated the "best and most useful" of 41 presentations given over five CPD events for public and private sector stakeholders in urban mobility across Europe (see 5.6). Worldwide, I'DGO findings have been used in training for over 1,000 professionals and, in the UK alone, for over 500 planners and highways engineers in six British cities as part of the 2010 national and regional roll-out of *Manual for Streets 2: Wider Application of the Principles* by the Chartered Institution of Highways & Transportation (CIHT) and the UK Department for Transport (DfT). The consortium has since been approached by CIHT to review *Transport in the Urban Environment*, its comprehensive guide to the design and management of urban road networks.

At grassroots level, I'DGO's approach has always been to empower and enable older people to create impact on their own terms. The consortium has been proactive in the Age Scotland campaign *Walk in our Shoes; Act on our Issues* and promoted by Age UK in its *Pride of Place* campaign, targeting local authority councillors and officers. Engagement with the City of Edinburgh's Council's *City for All Ages* Advisory Group has included an I'DGO-hosted public event opened by the Lord Provost of Aberdeen at the British Science Festival in September 2012, when an 82-year old Edinburgh resident debated age-friendly placemaking with speakers from Age Scotland, Anderson Bell Christie Architects and a former MSP. The work has also helped to highlight older people's issues in the media, including in *The Herald* newspaper, May 2012.

I'DGO is a case study in *Making the Case for the Social Sciences: Ageing* (see 5.7), published by the British Society of Gerontology, the Academy of Social Sciences and AgeUK. The report was launched in Westminster in July 2010 at a ministerial Q&A led by [text removed for publication],



who, two years later, gave the opening address at the presentation of the l'DGO TOO findings in the Headquarters of the European Commission in the UK (see 5.8). Seven elected members across the four UK governments have publically supported l'DGO's work, with the Scottish [text removed for publication] for Health, Wellbeing and Cities saying "The findings are an important touchstone for those of us in policy development, bringing real benefits to Scotland's growing number of people aged 65+" (see 5.9). In 2013, the consortium hosted fringe receptions and panel events at both the Plaid Cymru Spring Conference in Wales and the Local Government Association annual conference in Manchester, blogging by invitation on the LGA conference website and in its FirstOnline magazine.

l'DGO was a runner up in the International Design for all Foundation Awards 2013, with one judge commenting "...there is a lot that others can learn from their approach". Our findings were used during the development of FUTURAGE, Europe's new road map for ageing research; [text removed for publication] Age UK [text removed for publication] described them as part of an evidence base on mobility, access and the design of the external environment which was "crucial to the development of the research questions formulated in Chapter Two, Ageing Well at Home and in Community Environments". After Ward Thompson was invited to present l'DGO findings at the Toward an age-friendly EU by 2020 conference in Brussels (May 2013), [text removed for publication] AGE Platform Europe wrote "Your visions and innovative solutions will help us to draw recommendations on how to create/ adapt spatial environments to the specific needs of our ageing populations [and] ... pursue our campaign to create age-friendly environments across the EU" (see 5.10). Drawing on l'DGO, and its promotion through KT-EQUAL, Ward Thompson has also advised on the environmental implications of research funded by the Canadian Institute for Health Research as part of the City of Vancouver's Walk the Talk initiative.

5. Sources to corroborate the impact

- 5.1 *Lifetime Neighbourhoods* (ISBN: 978-1-4098-2973-7), DCLG, 2011. See pp 48-50, 65, 68-69... http://www.communities.gov.uk/documents/housing/pdf/2044122.pdf
- 5.2 *Global Age-Friendly Cities: A Guide*, World Health Organization, 2007. See p 76... http://www.who.int/ageing/publications/Global age friendly cities Guide English.pdf
- 5.3 A factual statement from [text removed for publication] PricewaterhouseCoopers Aarata, tasked by the Cabinet Office of Japan to develop its *FutureCity* initiative, has been made available.
- 5.4 *Designing Streets: A Policy Statement for Scotland*, Scottish Government, 2010. See pp 1,15... http://www.scotland.gov.uk/Resource/Doc/307126/0096540.pdf
- 5.5 Analysis of Consultation Responses, Scottish Government, 2012. See p 5... http://www.scotland.gov.uk/Resource/0040/00409059.pdf See also pp 4-5... Creating Places; A policy statement on architecture and place for Scotland, 2013. http://www.scotland.gov.uk/Resource/0042/00425496.pdf
- 5.6 Authorised quote from e-mail correspondence. Contact details for further corroboration from the AENEAS [text removed for publication] have been provided separately.
- 5.7 Making the Case for the Social Sciences: Ageing, AoSS, Age UK, BSG, 2010. See pp 22-23... http://tinyurl.com/pgd76an
- 5.8 Contact details for this Member of the House of Lords source have been provided separately.
- 5.9 Contact details for further corroboration from [text removed for publication] Health, Wellbeing and Cities have been provided separately.
- 5.10 A factual statement from [text removed for publication] AGE Platform Europe has been made available in support of this case study.