



Designing for wellbeing in the built environment




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WISE research unit

- WISE stands for Wellbeing in Sustainable Environments
- Founded in 2004, with Lynne Mitchell
- Investigating impacts of the built environment on people's wellbeing, mental health and quality of life
- Based at Oxford Brookes University until Sept 09, when the unit moved to the University of Warwick
- Now sits between 2 Schools, Engineering and Health and Social Studies, as a truly multidisciplinary research area
- Focus on older people to date, but extending to other ages and groups



WISE research unit

- Focus now on lifelong health and wellbeing rather than older people's wellbeing:
 - Older people's wellbeing influenced by lifestyle and health growing up and through the life course (e.g. obesity and dementia link)
 - We believe in INCLUSIVE DESIGN: no point designing places that are good for older people if they are not for others
 - Aim to provide evidence-based guidance on designing buildings and places that optimise the wellbeing of everyone






Why design for lifelong wellbeing?

- Need to build/create sustainable developments and communities
 - Important to achieve more energy-efficient design that minimises unsustainable behaviour but have to design places people want to live in
 - Sustainability now embraces social and health aspects







Why design for lifelong wellbeing?

- Growing demand for inclusive design, especially with need to address disability issues (UK Disability Discrimination Act and social model of disability)
- Recognition of impact of environments on health - shift in health policy to lifelong health and wellbeing and healthy communities (obesity etc.)
- Growing use of Health Impact Assessments in development and regeneration activities






Why design for lifelong wellbeing?

- Professional responsibility – need alternative to current architectural education and practice which focuses on architecture as 'art'
 - Architecture has retreated from its social role after the disasters of the 1960 and 70s
 - Impacts on people barely considered, encouraged to think about buildings as sculpture, what 'the masses' like is despised! Emphasis is on being original rather than using tried and tested models






Why design for lifelong wellbeing?

- Clear evidence now that buildings and places affect people (small but significant influence), and that some places are better than others
 - Affect our behaviour
 - Affect social interaction and relationships
 - Affect how we feel (e.g. happy, sad, safe, claustrophobic, satisfied)
 - Affect our quality of life (how easy and comfortable it is to live our lives)
 - Affect how healthy we are
 - Affect how productive we are (e.g. at work)

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How does design affect health?

- The built environment affects both: 1) physical health (including general fitness); and 2) mental health and emotional wellbeing (including 'happiness')
- Influences health in 2 ways, directly and indirectly
 - Direct impacts include how environments make people 'feel' and whether or not they are likely to suffer injury (e.g. poorly designed stairs)
 - Indirect impacts are those that affect 'health determinants' – i.e. the impact is secondary (e.g. neighbourhood design affects opportunities for social interaction, which in turn affects health)

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How does design affect health?

- Built environments can also have either short-term or longer-term impacts
 - Short-term impacts stem from being within an environment at any particular point in time
 - Longer-term impacts are the result of living or working in a place for a longer period of time (e.g. a year or more)



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How does design affect health?

- Research has identified several key areas where buildings and places affect health and wellbeing
 - Obesity and general fitness
 - Mental health and wellbeing
 - Ageing and dementia
 - Respiratory health and allergies
 - Health related to diet
 - Injuries and accidents
 - Pain tolerance, recovery from operations and general effectiveness of healthcare facilities
 - Access to healthcare
 - Climate change risks

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How does design affect health?

- Ageing and dementia
 - Design of dwellings and neighbourhoods can affect whether older people can continue to live in their own homes as they become more frail
 - Many aspects of design have been found to affect the quality of life of people with dementia – e.g. ability to find their way, minimise distress and confusion
 - Possible that characteristics of the built environment are direct or indirect risk factors for onset of dementia



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Why do research in this area?

- There is rapidly growing interest in the relationship between the built environment and wellbeing (among policy makers and practitioners as well as academics)
- There are many gaps in knowledge in this area, and very few academics carrying out the research
- Most existing research stems from public health, epidemiology, health geography and environmental psychology
- There are opportunities to make a significant impact

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What research should be done?

- Research should investigate the impact of individual features of design
- Research needs to address the big methodological challenges:
 - Obtaining information on user perceptions and experiences in a reliable way
 - Measuring the built environment
 - Finding ways of measuring more subjective or intangible elements of design, e.g. 'ugliness'
 - Controlling for all other influences on wellbeing
 - Tackling cross-disciplinary nature of research

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What research should be done?

- To generate effective design guidance, the following issues need to be addressed:
 - Potential conflicts between different users of the built environment
 - Conflicts between different requirements (e.g. social v. environmental ones)
 - The need to produce evidence in a form recognised as scientifically rigorous by policy makers, providers and funders
 - The economic implications of designing for health and wellbeing



Recent WISE research projects

- Neighbourhoods for Life project: investigated how outdoor environments can be designed to enable older people with dementia to use and enjoy them (EPSRC; 3 years)
- Urban regeneration and mental health project: investigated how the design of housing is related to the mental health of residents (Wellcome Trust; 3 years)
- I'DGO consortium: investigated how urban form affects older people's wellbeing (EPSRC; 3 years)
- Care homes project: investigated which aspects of design affect residents' wellbeing (Department of Health; 18 mths)

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Current WISE research projects

- I'DGO TOO: investigating how best to design the private outdoor spaces around housing for older people, to optimise residents' wellbeing (EPSRC; 2007-2011)
- Staff morale project: investigating how the design of psychiatric wards affect staff morale (DoH; 2007-2010)
- COGWORKS: investigating how the built environment can contribute towards healthy cognitive ageing (MRC network to prepare full bid; 2009-10)
- CityForm India: investigating sustainable urban form for India (EPSRC network; 2010-2012)

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Future research?

- Use of different methodologies
 - Large scale cross-sectional surveys, perhaps using secondary sources (housing/neighbourhood design variables can be added if postcode data available)
 - Longitudinal studies following progress of people moving from one environment to another
 - Trials investigating impacts of built environment interventions (perhaps only possible in healthcare settings?)
 - Laboratory 'experiments' using simulation (not necessarily immersion), testing psychological or biological responses to seeing or being immersed in different environments
 - In-depth qualitative research using ethnographic, participatory methods

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Future research?

- Investigation of impact of built environment on different aspects of mental health and wellbeing
- Investigation of the impacts of different aspects/scales of the built environment
- Investigation of different social groups



The future

- Creating a centre for excellence in design for wellbeing and evidence-based design
- Influencing the training of architects and other designers (Masters course on design for wellbeing, with professional accreditation)
- Feeding into policy and practice
- Developing assessments/awards for design for wellbeing



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The future

- Ultimately helping to create places that enable us as to flourish as human beings:
 - Make us feel good
 - Allow us to retreat from the world for rest and relaxation if we want to, or
 - Provide interest and stimulation to energise us
 - Enable us to have good relationships with our neighbours
 - Minimise friction within families
 - Encourage us to live healthy lifestyles



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