Gateway to independence

Two research projects at King’s College London funded by the U.K. Engineering and Physical Sciences Research Council under the EQUAL initiative.

1998-1999 An information/navigation aid for complex indoor spaces: feasibility study to establish older people’s needs. GR/MO4 730. £41,153
1999-2000 Older users’ perspectives on mobility-related assistive technology research: an exploratory study. GR/M70360/1. £46,172

Research aims
To involve older people in contributing to innovative technology research relating to:
Finding one’s way inside large, complex buildings
Mobility needs within one’s own home.

Research methods
Approach to five voluntary organisations (service and user based)
Focus group discussions:
- problems
- solutions
Technical development
Informal trials

Suggestions for way-finding device
“Weight is very important — you don’t want anything too heavy”
“Keep it simple”
“Arrow should keep turning and tell you where to go”

“Have something that will bleep if you go the wrong way”
“Simple corridor outline is good, because it shows you where you are”

“Controls must be very simple for arthritic hands to use”

Problems with stairs — and solutions
“I need to press on something to help me with the stairs”
“I can climb stairs as long as I hang on to the sides”
“I have to hold the banister rail and step up sideways”
“Grip rails are good as long as they are small enough to get your hands round. Need to have one on either side. I use the rail to pull myself up the stairs”

Focus group participants: wayfinding
61 participants in five groups
70% female
37% aged 75+
27% mobility problems
30% sight problems
50% hearing problems
21% self-reported poor health

Focus group participants: mobility
37 participants in four groups
82% female
57% aged 80+
68% living on own
38% minor disability
43% moderate disability
19% severe disability.

Scenarios for focus groups on mobility
- Scenario and pictures presented:
  - Each member selected 3 most critical pictures
  - Open discussion on problems and solutions

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Positive outcomes from research
- Fruitful three way partnership between older people, gerontologists and rehabilitation engineers.
- Active and positive contribution of older people to innovative research
- Better understanding by engineers of older people’s needs and preferences
- Counter-ageist
- Generating new technical solutions
- New academic partnerships