Workshop GERontologic Test suit
by Stefan Lechner
23 november 2016
Programme this workshop

• Introduction
• 3 studies on accessibility by Health Space Design
• GERT suit
• Research using the GERT suit

• ASSIGNMENT
Introduction

Stefan Lechner

• Hanze University of Applied Sciences, Groningen, the Netherlands
  • Lecturer Facility Management
  • Centre of Expertise Healthy Ageing
    • Project Leader Living Lab Health Space Design
Wayfinding in a Hospital

- Method: shadowing (i.a. MacDonald, 2005)
- Follow up: design workshop Arts students

Result: 3 bottlenecks

Improvement: minimal variant

Improvement: maximal variant
Design workshop by Arts students (1)

‘cloud route’

‘forest route’

Seidel & Feenstra, 2014
Design workshop by Arts students (2)

abundance of information

unity

Uijtewaal, Wolff, & Idsinga, 2014
• Quasi experiment, qualitative observations, coding
• Context: home for elderly people with dementia
• Measurement: feeling at home, i.e. privacy, autonomy, wayfinding, orientation, self-support, safety (i.a. Fay & Owen, 2012; Heggen & Hauge, 2008; Frank, 2005, Robinson, Reid, & Cooke, 2010)
• Results:
  • feeling at home is improved,
  • positive effect on privacy, autonomy, wayfinding, and orientation

Ensink, 2015
What is a GERT suit?
GERontologic Test suit *

The age simulation suit offers opportunity to experience the impairments of older persons even for younger people

The age-related impairments are:

• loss of sight and hearing
• joint stiffness in the arms and legs
• narrowing of the visual field
• head mobility restrictions
• reduced grip ability and coordination skills

* http://www.age-simulation-suit.com
Good practice: use of GERT suits in research

Study:
- Assess the hospitality and develop a policy
- Take into account the needs of the elderly

Setting:
- Hospitals
- 60 second-year bachelor students of a course in hospitality
GERT Suit: method

- Participant observation
- Independent variables
  - Route complexity
  - Simulated physical ageing, by use of GERT suits
- Dependent variables
  - Route efficiency
  - Walking speed
  - Heart rate and respiratory rate
Preparations in the porter’s lodge
Participant and observer are on their way
Good idea: they catch a golf cart!
Participant and observer totally lost at the other side of the road
Elevator or stairs?
Arrived at the destination
Route complexity and simulated physical ageing negatively influence wayfinding (Zijlstra, et al., 2016)

• Complex route > less efficiently
• Simulated elderly participants:
  • Lower speed
  • Higher heart rate and respiratory rate > more energy performing the wayfinding task
Other use of GERT suit

• Research lessons
  • Observation techniques
  • Measures
  • ...

• Workshops
  • Care homes
  • Fire drills
  • ...

• ...

Geïnteresseerd in Health Space Design?

Wil je stage lopen of afstuderen in Groningen?

Neem een flyer mee!
Opdracht

• Ga met de trap naar beneden
• Ga op een van de gekleurde klapstoelen zitten
• Loop door naar de centrale hal en neem de houten trap
• Kom terug naar dit lokaal naar dezelfde koffer
• Probeer je bij het uitvoeren van de opdracht in te leven dat je ook echt oudere bent