

The Impact of Care Home Design on Residents and Staff

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For the Design in Caring Environments (DICE) Project

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Research Team

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Background

- Building design influences quality of care and quality of life within caring environments
- Poorly developed evidence-base to inform design standards and guidelines
- Standards regard such needs as *privacy* or *dignity* as ‘care issues’ rather than as the building features which promote them.

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Project: Aims

To systematically investigate relationships between the *physical environment* of nursing homes and:

- The quality of life of residents
- The job satisfaction and morale of care staff

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Background (Methodology)

How to study the impact of care home design:

- Longitudinal studies? High attrition
- Experimental studies? Impractical & unethical
- Interview studies? high levels of cognitive impairment among residents

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Field Study: Design

- Assess the physical features of a representative sample of care buildings for older people
- Measure the QOL of residents using observational and interview techniques
- Measure staff morale
- Identify building features associated with higher resident QOL and higher staff morale

Assessment: SCEAM

(Sheffield Care Environment Assessment Matrix)

- Over 300 relevant building features derived from:
 - Research literature
 - Care-industry Standards
 - Professional Guidelines
- Features clustered into:
 - 10 resident ‘domains’ (e.g. privacy; safety & health)
 - 1 staff ‘domain’ (provision for staff)

Completing the SCEAM

Features scored as present (1) or absent (0) using:

- Walk-through checklist
- Plan analysis
- Photographs
- Instrumental measurements (light; temperature, etc.)

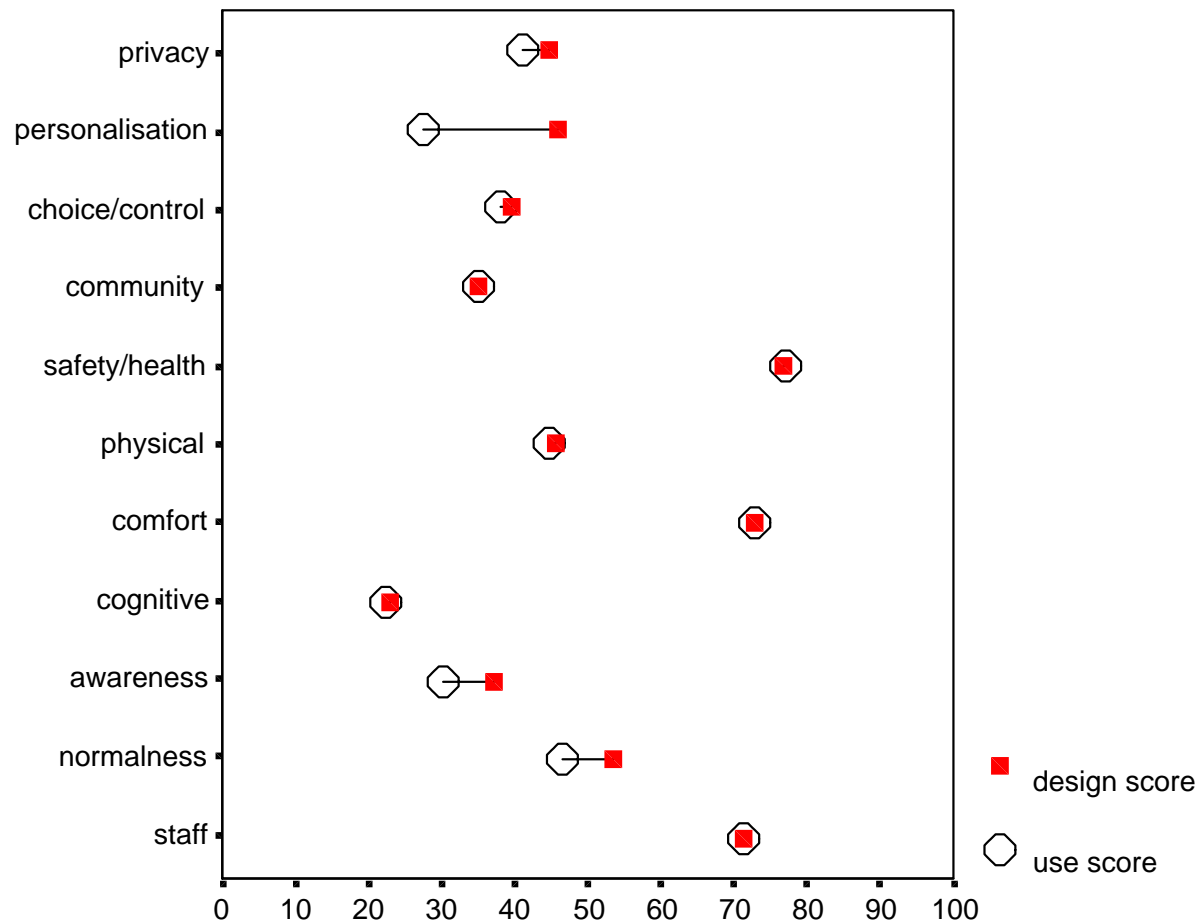
Completing the SCEAM

- Separate scores for each feature to reflect *building as designed* and *building as used*
- For example, if shower used as storage area then, within the domain ‘Choice/Control’ this feature would score ‘1’ for design, but ‘0’ for use.

Scoring the SCEAM

- Scores summed for each domain, then...
- Expressed as a percentage of the total number of items in that domain
- E.g. The domain *Privacy* has 40 features
- If 30 of these features are present, that building scores 75% on that domain

SCEAM Building profile



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Resident Assessments

- CAPE BRS, Pleasant Events Schedule-AD, Apparent Emotion Schedule
- Structured observation of residents (using DCM elements) including assessments of well-being
- Interview with the resident where possible including PGC Morale Scale; proxy interviews with care workers

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Care Staff Assessments

- The Work and Life Attitudes Survey (Job Satisfaction Subscale)
- Selected subscales from the Nursing Stress Scale

Results: The Sample

- 38 homes assessed in Sheffield/Rotherham
 - 11 Small (<31 beds)
 - 14 Med (31-41 beds)
 - 13 Large (41+ beds)
- 452 residents profiles
- 957 nursing/care staff profiles







Descriptive Results: General

	Small Homes	Medium Homes	Large Homes
Dependency Scores: 36 = high	12	14	19
Staff hours per resident/week	21	19	25
Choice/control (as used)	58	49	34

Descriptive Results: Residents

	Small Homes	Medium Homes	Large Homes
QOL ratings of 'wellbeing'	38%	33%	13%
Median percent of time active	38%	46%	28%
Self reported morale (1-17)	10	10	9

Descriptive Results: Staff

	Small Homes	Medium Homes	Large Homes
Hours worked per week (median)	30	30	36
Job Satisfaction: 105=hi satisfaction	81	79	72
Job Stress: 39 = most stress	13	14	15

Building Domain Scores and Quality of Life

- ‘Use’ scores more strongly associated with QoL outcomes than ‘design’ scores.
- Positive associations; higher:
 - Choice/control = higher well-being
 - Community = higher physical activity
 - Physical support = higher control of environment
 - Cognitive support = higher positive emotion

Building Domain Scores and Quality of Life

- Not all associations positive.
- Higher levels of:
 - Safety/health = lower ‘enjoyment of activities,
 - Safety/health = lower levels of ‘environmental control’

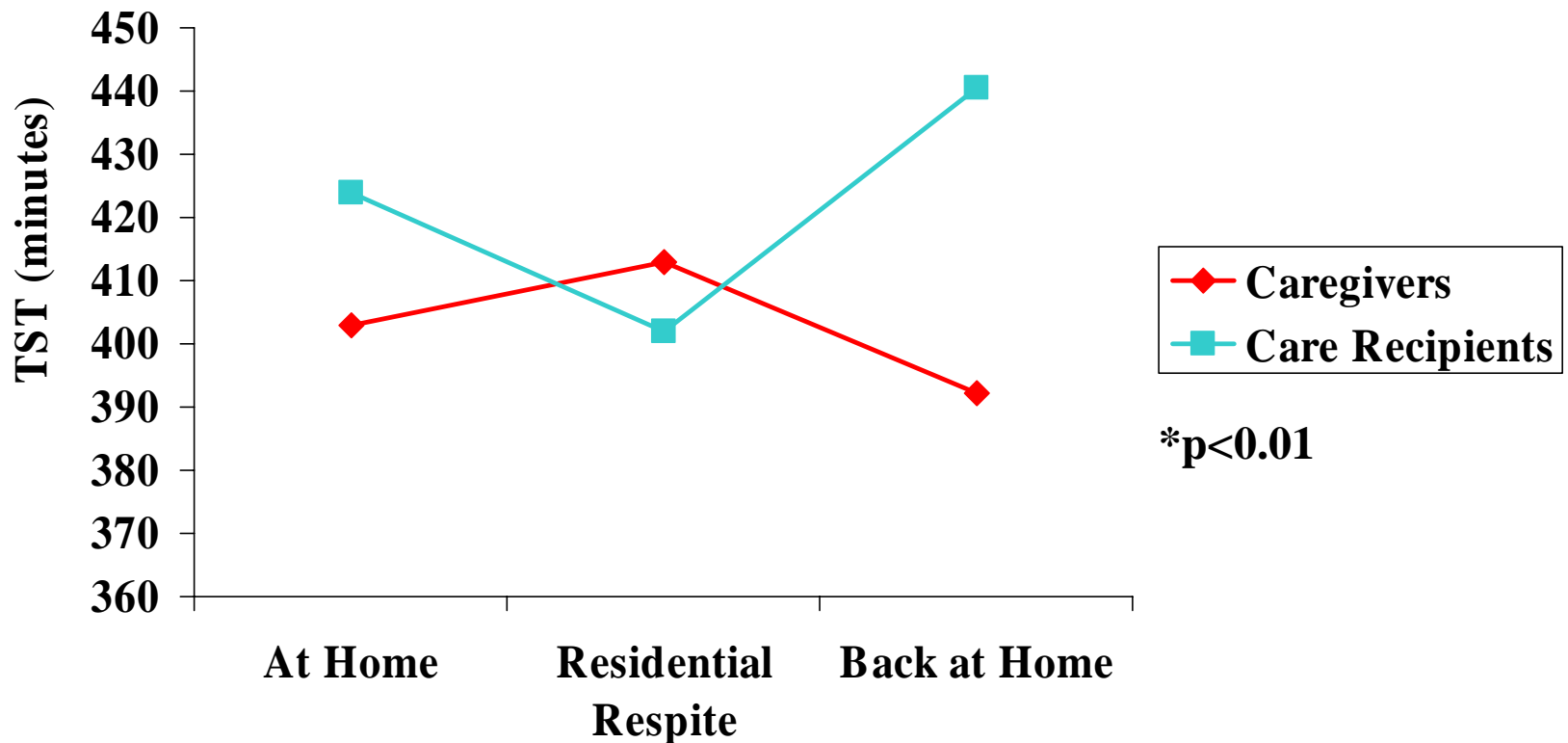
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Summary

- DICE: a successful interdisciplinary collaboration
- SCEAM valid and reliable
- Resident QOL and staff morale differ between building types - but so does mix of residents and staff
- Evidence that buildings as used impact on Resident QoL (positively and negatively)

Where Next?

Impact of Residential Respite on Total Sleep Time (TST) of People with Dementia and their Primary Carers



Data points = 2 week periods