OBJECTIVES
To understand the impact of spatial configuration on social life for people experiencing dementia in long-term care facilities by utilizing the analytical space syntax tool.

Field Observation into the Environmental Soul: Spatial Configuration and Social Life for People Experiencing Dementia


Key Concepts/Context
Long-term care facilities (LTCFs) serving people with dementia are often designed with visiting family members or friends in mind rather than the needs of the patients themselves. The authors suggest that architectural designs within LTCFs should be considered from the perspective of the patients occupying these environments. Previous studies have reinforced the idea that unsupportive physical environments can contribute to challenging behaviors in people with dementia of the Alzheimer’s type (DAT), while well-designed environments that increase independence, social contact, and activity levels may reduce challenging behaviors. Space syntax is an analytical tool used to objectively measure spatial layouts of physical settings. The authors suggest that, in line with spatial syntax theory, spatial configurations characterized as having greater proximity and visibility should promote social interactions in long-term care facilities for people with dementia of the Alzheimer’s type (LTCF-DATs).

Methods
This study employed a multi-method, 3-stage research design that involved spatial analysis and behavior mapping. Digital layouts of three different LTCF-DATs were spatially analyzed, and field observations of patients within these facilities took place over two days in each facility for a total of 12 hours per facility. Social interaction data were aggregated with the amounts and intensities of these interactions in a given space.
Findings

Evaluation of the spatial analysis results, when combined with behavioral mapping results, found that residents were involved in low-level social interactions in locations that featured better proximity and visibility (or higher social integration and space between objects). Higher-intensity social interactions took place in locations with less space between objects and lower levels of social integration. This suggests that in order to promote higher levels of social interaction between caregivers and residents, lower levels of visibility and proximity are preferable for LTCFs.

Limitations

This study took place over a relatively short period of time within a small number of different locations and a small sample size of participants. Results derived from this methodology may vary widely depending on patient and staff populations of different LTCFs. Little to no qualitative data were gathered from patients or staff.

Design Implications

This study suggests that private spaces and rooms for people with dementia may provide greater opportunities for patient independence and personalized care. Similarly, within social spaces, a balance could be struck between privacy and openness so that staff and patients can interact in an environment that allows for more improvisation. Ultimately, from an interior design perspective, finding a balance between healthy amounts of visibility in and accessibility to public spaces could be balanced with private areas that promote deeper social interactions.