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The Effect of Space on Health and Well-Being: An Environmental Assessment for Home-like Long Term Care Settings

It is known that the appropriate design of long-term care environments can make positive differences in the daily lives of the elderly. Yet, the literature lacks of studies that compare the outcomes of different design decisions. This research investigates the presence of differences in the health and well-being outcomes of the elderly who reside in different adult care homes which are limited to a 12 bed capacity. Social interaction, privacy, accessibility (to different functions and to the outdoors) and satisfaction are major factors that are affected by the design and can make a difference in health and well-being outcomes. A multiple case study methodology was employed by selecting cases from the State of North Carolina. The study has been carried out at two different sites that contain 5 buildings (3+2) in total. Each building group on the same site has the same plan layout whereas buildings of different sites have distinct plan configurations. Behavior mapping techniques were used for objective observation of each building for two weekdays and one day in the weekend. Caregivers were asked to fill out a self-administered survey to provide information about the residents. After the completion of the behavior mapping, interviews were conducted with willing residents. Resident groups at both sites are comparable in terms of their physical and cognitive competence. Behavior maps from two sites (180 maps) were analyzed by counting the number of the activities, the use of space, and the number and place of the conversations that were observed in and around the facilities. Analysis showed that plan type which isolates the living area from dining and kitchen areas leads to poor social interaction and poor use of the living area. Whereas the preliminary data analysis of the plan type with combined common areas provided evidence of higher social interaction.