## A Causal Model for Environmental Design of Residential Community for Elderly Well-Being in Thailand

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**Abstract :** This article is an extension of previous research presenting the relevant factors related to environmental perceptions, residential community, and the design of a healing environment, which have effects on the well-being and requirements of Thai elderly. Research methodology began with observations and interviews in three case studies in terms of the management processes and environment design of similar existing projects in Thailand. The interview results were taken to summarize with related theories and literature. A questionnaire survey was designed for data collection to confirm the factors of requirements in a residential community intended for the Thai elderly. A structural equation model (SEM) was formulated to explain the cause-effect factors for the requirements of a residential community for Thai elderly were classified into three groups when utilizing a technique for exploratory factor analysis. The factors were comprised of (1) requirements for general facilities and activities, (2) requirements for facilities related to health and security, and (3) requirements for facilities related to physical exercise in the residential community. The results from the SEM showed the background of elderly people had a direct effect on their requirements for a residential community from various aspects. The results should lead to the formulation of policies for design and management of residential communities for the elderly in order to enhance quality of life as well as both the physical and mental health of the Thai elderly.

Keywords : elderly, environmental design, residential community, structural equation modeling

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