



KEY POINT SUMMARY

OBJECTIVES

The objective of this paper is to examine if the SMB method can help in defining an ideal outdoor environment in nursing homes.

Outdoor environments at three nursing homes: Semantic environmental descriptions

Bengtsson, A., Hägerhäll, C., Englund, J. E., & Grahn, P. 2015 | *Journal of Housing for the Elderly*. Volume 29, Issue 1-2, Pages 53-76

Key Concepts/Context

The authors call attention to research that indicates the importance of outdoor environments to the lives of elderly people in nursing homes. Nursing homes vary in terms of outdoor environments – from none to very elaborate establishments, with no evidence as to whether these meet the needs and desires of their users. The authors use the semantic environmental description (SMB), a standardized tool, to describe an outdoor environment through assessments of eight dimensions – pleasantness, complexity, unity, enclosedness, potency, social status, affection, and originality (on a 1-7 scale). For this study, four outdoor environments in three actual nursing homes and one imagined ideal facility were assessed and compared. The authors concluded that the SMB method helped in composing an ideal outdoor environment for nursing homes.

Methods

The SMB method was used to assess and compare one imagined ideal outdoor environment and four actual ones, all at nursing homes. The three nursing homes examined were located in urban areas in Sweden and varied in the context of design and content, spatial relations with indoor environments and neighborhood, and location. Since residents of the three nursing homes were unable to participate in the study owing to physical or psychological disabilities, 26 members of two pensioner organizations participated in the study – assessing the four outdoor environments and the ideal one. The ideal outdoor environment was also assessed by 26 nursing home staff. The outdoor environments included an atrium and an unfenced garden in one nursing home, a wire-fenced garden facing the sea in the second, and a garden fenced from a large courtyard by tall, solid wooden fences in the third. The eight SMB dimensions were the dependent variables. The data was analyzed statistically. The ideal and real environments were compared using cross-case analysis.



Findings

The study found that both pensioners and staff considered high pleasantness to be very important to an ideal outdoor environment. The eight dimensions in the SMB method were assessed as below:

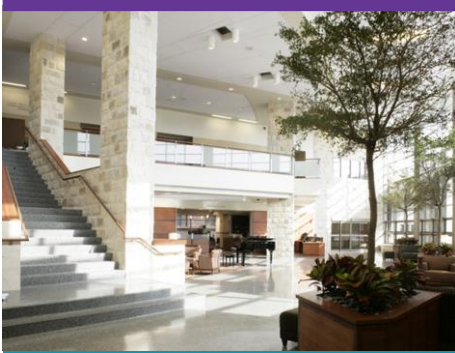
- Pleasantness: Adjectives associated with this dimension were: stimulating, secure, idyllic, good, and pleasant (positive); ugly, boring, and brutal (negative). All four outdoor environments were considered to be moderate or better with regard to comfort, beauty, and safety. The ideal environment scored 6.4 on pleasantness.
 - The seaside garden, which scored the lowest for pleasantness, was enclosed on three sides by fences, trees, or bushes, and the view of the sea on its unfenced side was partially obstructed by vegetation. It offered little stimulation or variation.
 - Even though the courtyard garden was small, it was considered to be more pleasant ($p < 0.0001$), having more places to sit, a water fountain, and a variety of annual and perennial plants, trees and bushes. It had little contact with the surroundings.
 - The atrium had two water features and several annual plants, small trees and bushes, and ground-covering perennials. It had little contact with its surroundings. ($p = 0.0004$).
 - The unfenced garden in the first nursing home was rated the highest in terms of pleasantness ($p = 0.017$). It was the most expensive environment, with several places to sit, walk (handrails provided along the path), and experience of the outdoors. It had the widest range of vegetation, a pergola with climbers, and several places with views of the surroundings.
- Complexity and unity: Adjectives associated with complexity were: varied, lively, and composite (positive); subdued (negative); with unity: functional, of pure style, consistent, and whole (positive). Pensioners and staff rated complexity in the ideal outdoor environment at 3.9 and 4.1, respectively, but rated unity higher at 5.0 and 4.5 respectively – differences not significant for either dimension.
 - The unfenced garden was rated closest to the ideal environment in complexity; the other gardens scored lower.
 - The unfenced garden and the atrium were rated to be close to the scores for the ideal environment in unity, with no significant differences. The seaside and courtyard garden scored much lower ($p = 0.002$; $p = 0.001$).



- Enclosedness: Adjectives associated with enclosedness were: closed and demarcated (positive); open and airy (negative). Pensioners and staff rated the ideal outdoor environment on enclosedness at 3.3 and 3.0, respectively – no significant difference. The study found that the outer definition of the outdoor environment was critical for the rating of enclosedness. Gardens that were completely enclosed and had little or no contact with their surroundings and those having a high degree of contact with their surroundings were not rated as ideal.
- Potency: Adjectives associated with potency were: masculine and potent (positive); feminine and fragile (negative). Potency in an ideal outdoor environment was rated 4.1 by pensioners and 4.5 by staff ($p=0.003$). Pensioners rated potency in the actual environments, except the courtyard garden, higher than the ideal environment. The authors conclude that outdoor environments in nursing homes should be a balance between masculine, hard, powerful shapes and feminine, soft, fragile shapes and contents.
- Social status and affection: Adjectives associated with social status were: expensive, well-kept, and lavish (positive); simple (negative); with affection: modern and new (positive); timeless and aged (negative).
 - The pensioners rated social status for the ideal environment 4.6 and staff 4.1 – the difference was not significant. The social status of the atrium and the unfenced garden was rated close to that of the ideal environment. The seaside and courtyard gardens were rated lower ($p<0.0001$; $p=0.0001$).
 - Affection in the ideal environment was rated 3.9 by the pensioners and 4.4 by the staff – no significant difference. Pensioners rated the unfenced garden close to the ideal environment and the seaside and the courtyard gardens higher than the ideal environment ($p=0.0005$; $p=0.0002$). The atrium was rated lower.
- Originality: Adjectives associated with originality were: curious, surprising, and special (positive); ordinary (negative). Originality in the ideal environment was rated 3.8 by pensioners and 4.5 by staff ($p=0.04$). Pensioners rated the four outdoor environments lower than that of the ideal one. The unfenced garden, which scored closest to the ideal environment, had more ornamental trees and bushes than the other gardens.

Limitations

The authors do not identify any limitations to their study. It may be noted that the authors considered the nursing home residents unable to participate in the research



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because of physical, psychological, or both disabilities. It is assumed (as there is no reference otherwise in the article) that the research participants from the pensioner organizations did not have these disabilities. The perspectives of these participants may not truly reflect the perspectives of the residents. People with physical disabilities may have different needs as may people with psychological ones.

Design Implications

According to the authors, following may be considered for outdoor environments in nursing homes:

- Incorporating stimulating features along with appealing and safe places
- Outer boundaries should be created to ensure feeling of being safely enclosed, not confined.

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