



KEY POINT SUMMARY

OBJECTIVES

To explore important dimensions of caregiver perceptions of physical and architectural features of salient environments within healthcare facilities and to investigate differences in evaluation of employees across different demographics.

Factors influencing evaluation of patient areas, work spaces, and staff areas by healthcare professionals

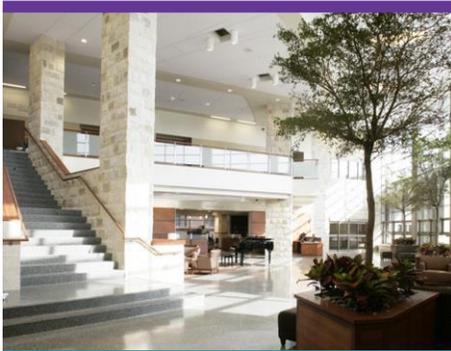
Sadatsafavi, H., Walewski, J., & Shepley, M. M. 2013 | *Indoor and Built Environment* Volume 24, Issue 4, Pages 439-456

Key Concepts/Context

One important element of high-quality healthcare delivery is a motivated and satisfied staff. Healthcare executives should regularly examine the factors that influence clinicians' perceptions of satisfaction and quality so that necessary changes can be addressed. Previous studies have discussed the importance of paying attention to architectural features, interior design features, and ambient features (lighting, noise levels, temperature, and odors) in hospitals and how these factors influence employee satisfaction and productivity, but a more comprehensive analysis that involves a variety employee demographics is needed.

Methods

- 496 anonymous surveys were gathered from full-time healthcare professionals (318 registered nurses and 178 other professionals) working in eight different short-term acute care hospitals of varying sizes located throughout the U.S.
- Surveys were divided into two sections: participant demographics and background information, and individual participant evaluations of 27 different physical and architectural features of their respective healthcare facilities. The second section made distinctions between staff workspaces, patient areas, and staff areas, and asked for satisfaction ratings on a 7-point scale (1 being very dissatisfied, 7 being very satisfied).
- Data were analyzed using the Analysis of Moment Structures (AMOS) version 21 and the IBM Statistical Package for the Social Sciences (SPSS). Confirmatory factor analysis and principal component analysis were also conducted to help determine associations between architectural features and employees' overall perceptions of their work environment.



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Findings

Statistical analysis of survey results found that employees under the age of 40, as well as employees who worked in a facility for less than 10 years, were more perceptive of the physical aspects of patient areas, especially furniture, finish materials, and artwork. Employees working during the day appeared to care more about electric lighting, the acoustic environment, and space layout. Generally, nurses cared more about patient area features, while non-nurse employees cared more about staff area features. Finishing materials and indoor air quality held the highest relative importance among the 27 features included in the second section of the survey, indicating that healthcare workers are very aware of safety-related risks in the workplace. The survey showed that employees highly valued information they received from employers regarding organizational efforts in reducing indoor air contaminants. Participants across all demographics working at any time of the day indicated sensitivity to noise levels. Participants also placed higher value on artwork located in staff areas over other locations within the hospital.

Design Implications

This study found that the finishing materials used in the design of the workplace played a critical role in influencing staff satisfaction with their physical environment. Designers selecting finishing materials should consider materials that promote high indoor air quality and employee safety as well as patterns, colors, and textures that might be visually appealing. Importance was also found in the availability of comfortable furniture that utilized ergonomic designs such as adjustability and contoured edges. From the employee's perspective, artwork and views of the outdoors were highly valued in staff areas; designers might consider incorporating these features into both patient and staff areas to maximize their positive effects.

Limitations

The authors cited several limitations within the study. Questionnaires such as the one used in this study cannot be expected to fully account for the depth or meaning behind staff experiences with their workplaces; in other words, indications of "satisfaction" do not fully encompass complex employee perceptions of their environment. The number of responses received from certain demographic groups were small, resulting in the lumping together of several groups during analysis. Differences between medical departments should be considered before the findings of this study are generalized.

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