



## KEY POINT SUMMARY

### OBJECTIVES

This study contributes to the evidence base on factors related to physical environments by identifying healthcare provider perceptions on 16 design factors.

## Healthcare providers' perception of design factors related to physical environments in hospitals

Mourshed, M., Zhao, Y., 2012 | *Journal of Environmental Psychology*. Volume 32, Issue 4, Pages 362-370

### Key Concepts/Context

Most aspects of the physical environment having an impact on staff outcome are determined during early design stages of a building's lifecycle. Subsequent modifications at later stages are expensive and sometimes difficult to achieve due to the multidisciplinary nature of design decision making. An understanding of users' perception of design factors is therefore, essential for informed decision making during early design stages.

### Methods

Each of the items listed in the EBD Glossary Table below were identified from the literature, reviewed by clinicians, and revised twice before being used as a questionnaire in this study. The questionnaire was then provided to a random selection of doctors, nurses, technicians, and administrative/managerial staff in two Chinese hospitals. Finally, six nurses were interviewed to validate research findings.

### Findings

Results of this survey demonstrated a significant difference in perception between male and female healthcare providers regarding cleanliness, air quality, noise level, and provision of hand hygiene. Age had a significant effect on perception of noise level, spaciousness, location and orientation of the space, and architectural design. Overall, cleanliness was considered to be most important followed by air quality, noise level, and thermal comfort. Architectural elements were ranked lowest. The low ranking may possibly be related to previous research focused on specific aspects rather than an integrated whole.



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Limitations

Only a single facility was surveyed. Cultural bias may be present because only Chinese providers were surveyed.

Design Implications

The deliberate investment in tool development may provide an option for future research. Nurses in different clinical areas demonstrated different preferences regarding noise and may indicate the need to customize different design elements for different areas.

The Knowledge Repository is a collaborative effort with our partners



Additional key point summaries provided by

