



## KEY POINT SUMMARY

### OBJECTIVES

This study had two objectives:

1. To identify the effects of the healthcare physical and social environments on patient perceptions and expectations of well-being
2. To disentangle the contribution of the quality of physical and social environments on well-being

## Is it the place or the people? Disentangling the effects of hospitals' physical and social environments on well-being

Andrade, C. C., Lima, M. L., Devlin, A. S., & Hernández, B. 2014 | *Environment and Behavior*. Volume 48, Issue 2, Pages 299-323

### Key Concepts/Context

The authors allude to evidence regarding the role of the physical environment in healthcare settings on patient well-being. They also refer to literature that indicates the relevance of positive relationships with healthcare providers as crucial to patient well-being. In order to determine the significance of both the physical and social environments, two studies were undertaken. In the first study, the impact of the physical and social environments of a hospital on patient well-being is examined to determine their unique contributory roles; in the second study, the influences of each environment were separated. Results indicated that the quality of both aspects significantly impacts a patient's perception of expected well-being.

### Methods

The methodology involved two experimental laboratory studies. Research participants were randomly assigned to six possible conditions – good, neutral, or inadequate hospital physical environment, and positive, neutral, or negative hospital experience. In the first study, participants were shown one of a series of photographs of three different hospital physical environments or listened to one of three stories depicting three different healthcare experiences. Using the information they received about one of the environments (physical), they were asked to draw inferences about the other (social), and vice versa using a 5-point Likert scale. The dependent variables were 'quality perception of the physical environment', 'quality perception of the social environment', and 'expected well-being'. For the second study, participants listened to a story about a hospital visit and were shown photographs of that hospital. Participants' responses were analyzed statistically.



### DESIGN IMPLICATIONS

The study indicates that a good physical environment of a hospital is perceived to have better quality than that with a neutral or poor physical environment. This perception, according to the authors, impacts patient well-being.

### Findings

According to the study results, regarding the quality of the hospital environment, participants perceived:

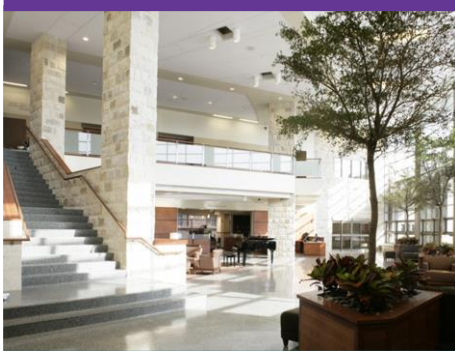
- The hospital with a good physical environment to have better quality than that with a neutral physical environment, which in turn was considered to have better quality than the hospital with an inadequate physical environment ( $p < 0.001$ ).
- The positive social environment depicted by events in the positive story was perceived to have a better quality than the one depicted by the story with neutral events, which in turn was considered better than the story with negative events ( $p < 0.001$ ).

Regarding expected well-being, the study found that:

- The physical and social environments independently influenced expectations of well-being. However, the quality of social environment impacted the expectations of well-being more strongly than the quality of physical environment.
- Inadequate physical environment significantly lowered expectations of well-being ( $p < 0.001$ ). However, there was no significant difference in expectations of well-being between the good and neutral physical environments ( $p < 0.001$ ).
- The positive social environment led to significantly higher expectations of well-being than the neutral social environment, which in turn led to significantly higher expectations than the negative social environment ( $p < 0.001$ ).
- Better quality of hospital settings was perceived to be associated with the provision of better patient well-being.
- Older participants had lower perceptions regarding quality of the physical environment ( $p < 0.001$ ), quality of the social environment ( $p < 0.001$ ), and expected well-being ( $p < 0.001$ ).

The authors conclude that:

- Both the physical and social environments contribute to well-being; in this study, the social environment had more of an impact than the physical environment.
- The physical environment of a hospital has a significant influence on patient well-being independent of the impact of the social environment.



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- An inadequate physical environment significantly reduces expectations of well-being. However, an improvement from a neutral to good physical environment does not significantly raise patients' expectations of well-being.

### Limitations

The authors identify the following as limitations to their study:

- The research participants were not patients.
- A wholesome experience involves all-sensory participation; participants were only shown images of the hospital.
- Participants listened to a story; in the real world interactions between patient-provider involve two-way conversations
- It is difficult to equate the quality of the physical and social dimensions.

One other limitation is that the authors do not specify in this article what entails a good, neutral or poor physical environment in a hospital (they refer to a previous publication). A brief insight into this would have provided a better context.

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