



## KEY POINT SUMMARY

### OBJECTIVES

The project sought to explore the point of view of 6 to 12 year olds with regard to their hospitalization (including aspects of the built environment) to better understand their priorities and needs and improve the quality of pediatric care and professional training.

The project also sought to develop a new standardized instrument and test its validity in evaluating the satisfaction of hospitalized children.

## Children's Experience Regarding the Quality of Their Hospital Stay: The Development of an Assessment Questionnaire for Children

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### Key Concepts/Context

Pediatric care quality in Switzerland is evaluated mainly through the parents' opinion. There are no assessment questionnaires for children. However, research indicates that often, what the parents think does not match their children's evaluation of the quality of care and that they are often low to moderately correlated. This study examines on the development of a questionnaire assessing the satisfaction of children with their hospital stay.

This study took place in Switzerland.

### Methods

Researchers collected data from the pediatric wards of a university hospital in French-speaking Switzerland between March 2007 and January 2008. The researchers interviewed the children ( $n = 52$ ) before their release from the hospital. To be included in the study, participants must have: been between 6 and 12 years old, spent at least 2 days in hospital, been fluent in French, and not been hospitalized for psychological or psychiatric disorders.

The investigators developed the instrument in three steps. First, they conducted a presurvey of 10 parents, their children, and 13 pediatric nurses. Second, they carried out semistructured individual interviews with 52 hospitalized children exploring the topics discussed in the presurvey in a systematic way. Third, they formalized the instrument on the basis of the analyses of the first two steps. The final survey included 23 questions exploring three main domains: perception of



### DESIGN IMPLICATIONS

This study provides designers with a tool to help understand how children perceive their environment, specifically those questions that addressed infrastructure. This study included questions about the size and decoration of the built environment (the hospital room). The article states: “The hospital room was the subject of 2 kinds of comments about the size and decoration, 82% ( $n = 110$ ) of the children being satisfied with its size and 84% ( $n = 114$ ) satisfied with its decoration.”

These data indicate that children are aware of their physical environment, and, thus, designers should explore this more. It is important to note that the children also commented on the ambient environment, specifically noise and air temperature.

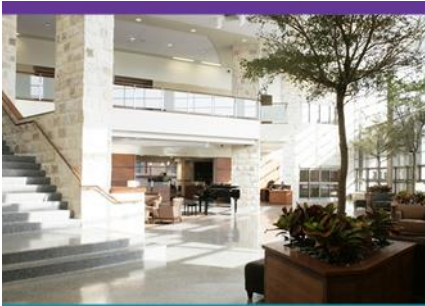
care, the emotional dimension, and infrastructure. The final version of the instrument also gathered demographic and medical information from the child’s hospital file and included a spot for the child’s comments and for the interviewer to write down observations and comments. The survey used two visual scales: a satisfaction scale using smiley faces, validated in prior studies, and an intensity scale also previously validated. The satisfaction scale ranged from *very happy, happy, mildly happy, not happy, to not happy at all*. The intensity scale for evaluating pain, fear, and frustration ranged from *not at all, a little bit, moderately, a lot, to a whole lot*.

Researchers conducted two types of data analysis: (1) a statistical analysis of the hospitalized children’s opinions describing the different variables and testing their association with several dependent variables and (2) a content analysis of the children’s spontaneous comments. Then, the investigators produced descriptive results for each item and tested the association between two categorical variables with the Fisher exact test (i.e., quality of sleep, overall assessment of the stay). Finally, they tested the association between a continuous variable and a dichotomous variable with the Wilcoxon test (i.e., age, length of stay). To explain the overall satisfaction score, they carried out a univariate regression analysis. For the bivariate or multivariate analyses, researchers used the odds ratio.

The investigators tested the questionnaire with 136 children (aged 6-12 years) at two Swiss hospital sites and found that 3 out of 4 children were satisfied overall with their hospital stay. Their relationships with the professional medical staff, explanations they received, games they played, and environment, all received positive evaluations. The most critical points were pain, fear, and the absence of relatives. Ninety percent of the children appreciated that their opinions were sought. These results reinforce the importance of having questionnaires available for the children to offer their opinions to enhance the quality of care.

### Findings

The findings of this study shed light on the opinions and experience of children’s hospitalization. However, four issues deserve particular attention as they could improve care in practice. They should be addressed in a perspective of care specifically oriented to children: sleep, pain, food, and fear. Although interventions to decrease sleep disruptions are not always possible, either because of the nature of the care delivered or the presence of equipment or therapeutics such as casts, environmental factors such as room temperature and, especially, noise level should be addressed.



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## Limitations

Interviewers noticed three factors that caused children to give hasty or partial answers: (1) personal aspects, such as difficulties of understanding in younger children or those who spoke another language at home, worries about their health, nightmares experienced the night before, discomfort or shyness due to the presence of an outsider in their room; (2) environmental aspects, such as a noisy surroundings and constant interruptions (care being delivered, parents' comments); and (3) situational aspects, which generated a lack of motivation to answer or impatience related to fatigue, the expectation of visitors, or the fact that they were about to leave.