

COLOR APPLICATION FOR HEALTHCARE ENVIRONMENTS

Interior Color for Pediatric Patient Room Design

Objective:

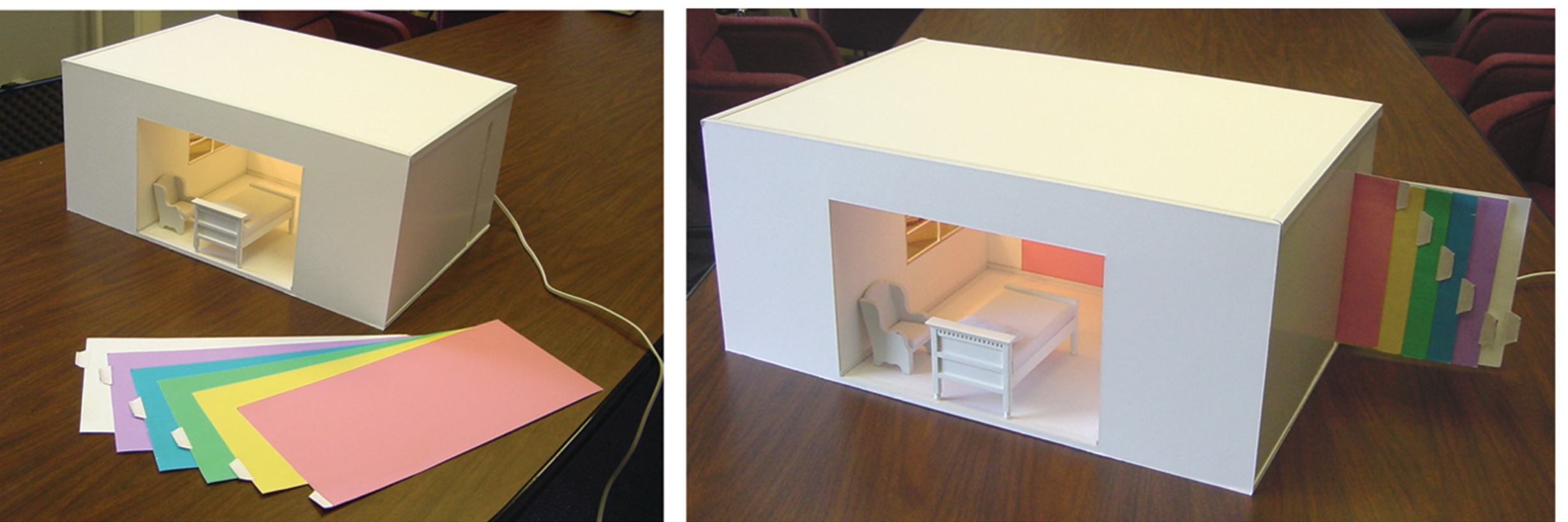
The purpose of this study was to investigate the value of color as a component of a healing environment for pediatric patient rooms. Color preferences from pediatric inpatient, pediatric outpatient, and healthy children groups were investigated and compared for group and gender differences.

Background:

Positive environmental stimulation can promote patient well-being by reducing stress or negative feelings. If environmental colors can have positive influences, then those colors will make patients more comfortable, reducing their stress. Although previous color studies are suggestive, none has focused on pediatric healthcare environments. Patients' health status may affect their reaction to environmental stimulation. There was a gap in the body of knowledge regarding the consistency of color preferences with regard to patient health status.

Methods:

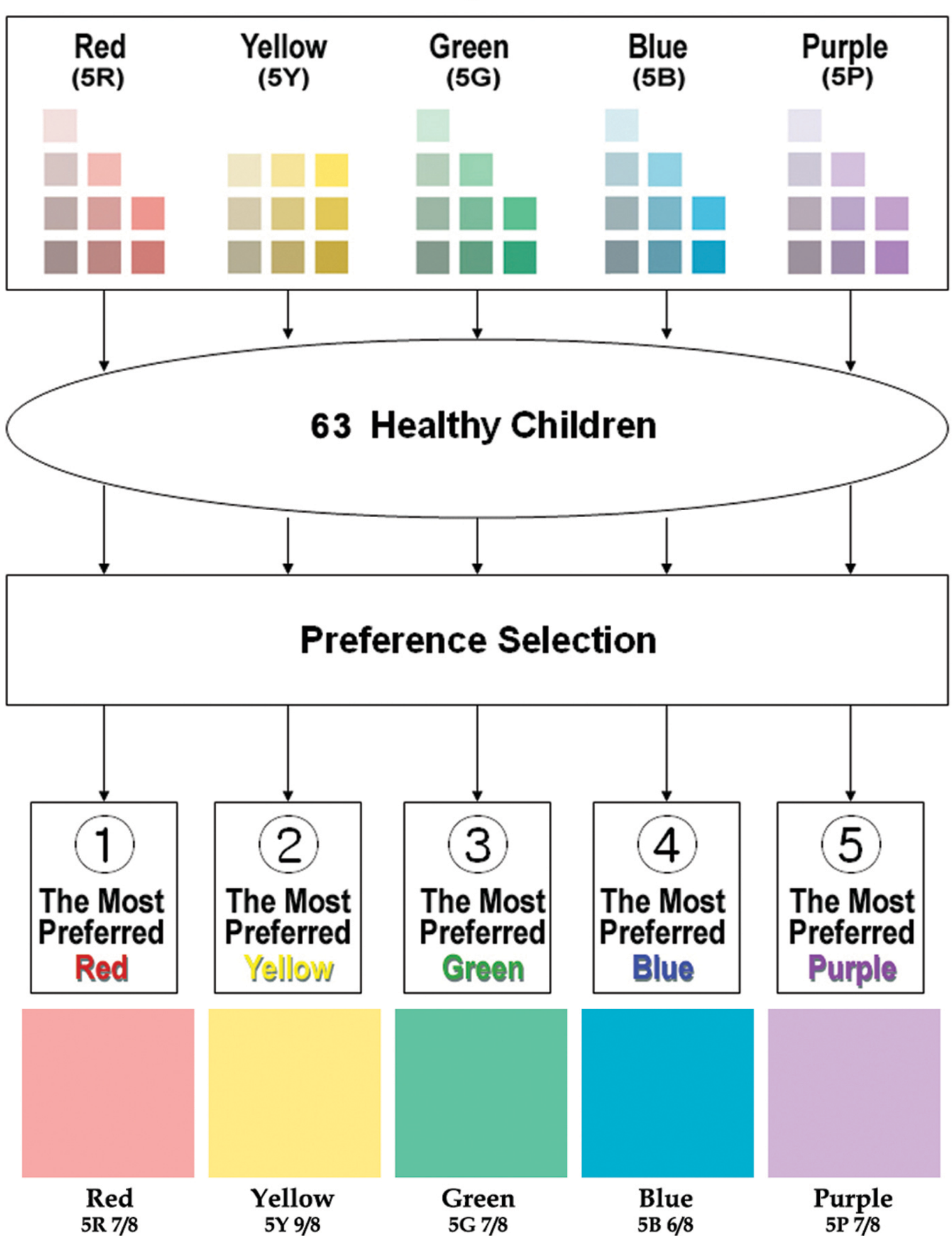
A simulation method was used because of its reliability and feasibility. It allowed for investigating the value of color in real contexts and controlling confounding variables. Previous color preference studies typically have been done with small colored squares of paper, which are visually different from seeing a color applied on wall surfaces. In addition, they failed to control confounding variables such as color attributes and light sources.



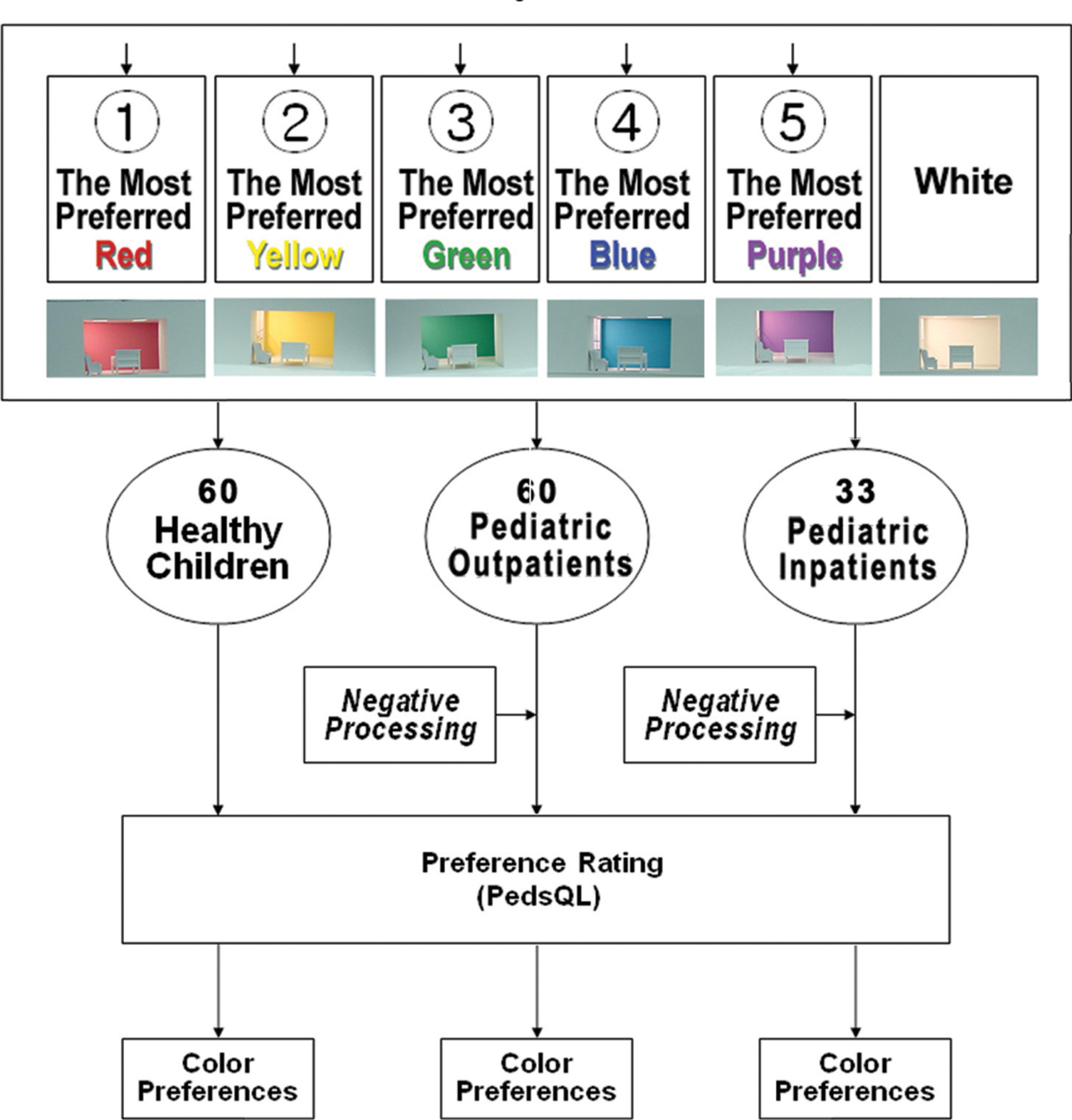
Pilot Study & Main Study:

This study consisted of two phases: a pilot study and a main study. The pilot study investigated healthy children's most preferred colors from each of the five hue families defined by the Munsell color system. Using the most preferred colors yielded by the pilot study, the main study measured color preferences from pediatric inpatients and pediatric outpatients, and then compared them to those of healthy children in order to investigate group and gender differences.

Pilot Study Structure:



Main Study Structure:



Results:

Group Differences

Group differences were not significant. This refuted the hypothesis that the color preferences of pediatric patients are different from those of healthy children.

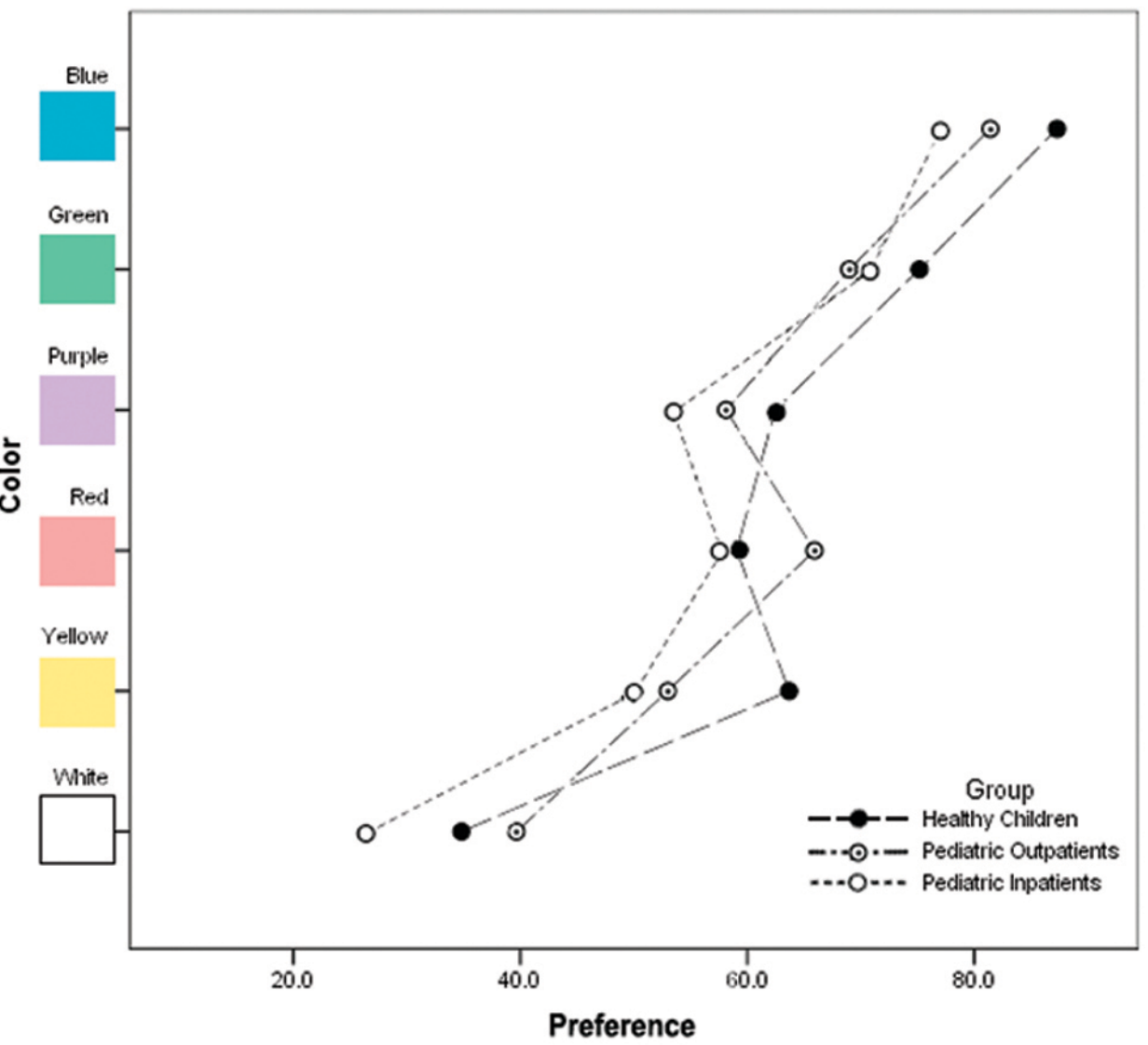


Figure 1. Means of Color Preferences by Groups

Gender Differences

Gender effects indicated that girls preferred red and purple more than boys do.

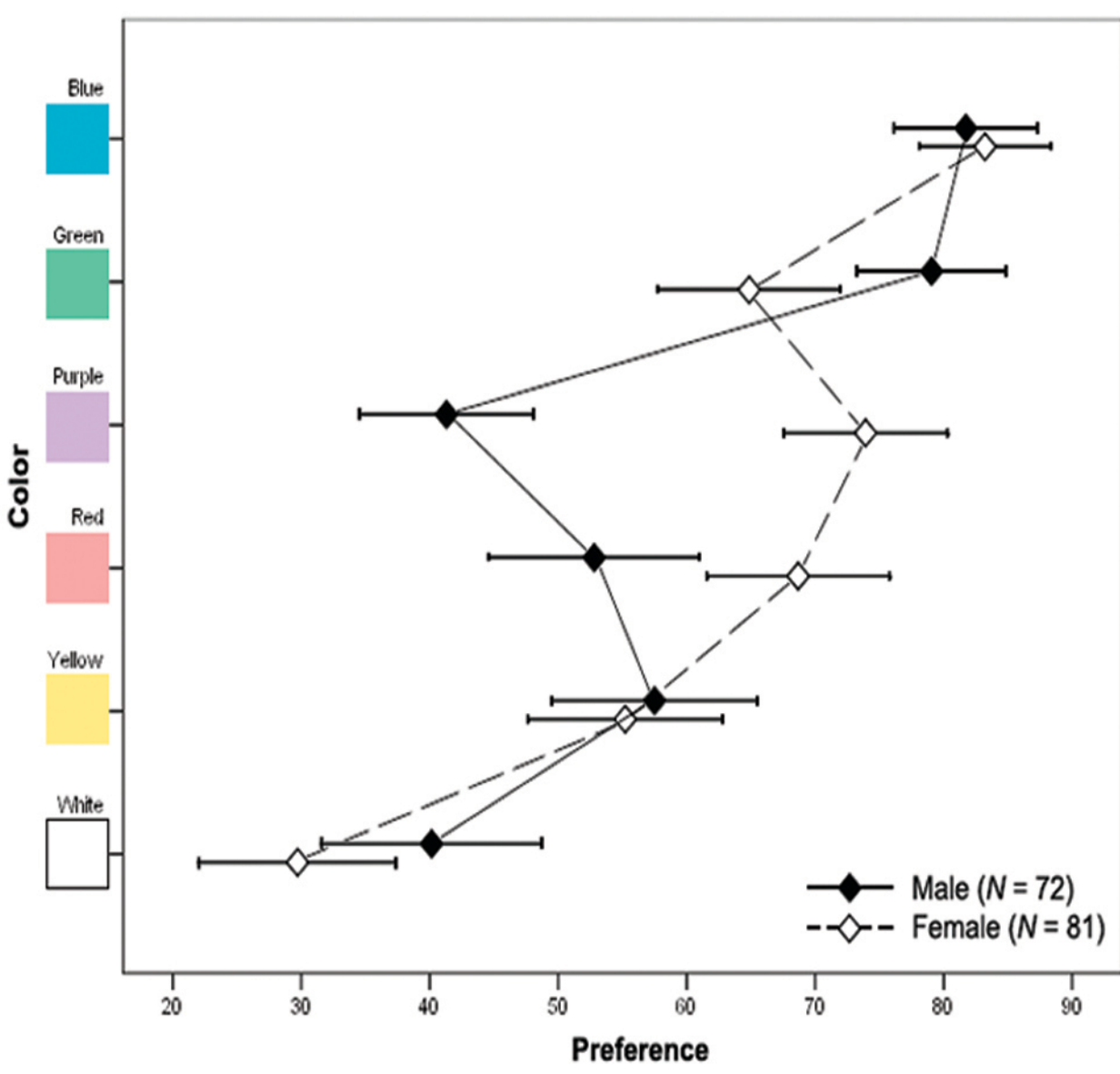


Figure 2. Overall Means and Confidence Intervals by Gender

Conclusions:

All three groups showed similar color preference patterns, except for yellow. Both pediatric outpatients and inpatients preferred yellow less than healthy children did. Healthy children's mean scores of color preferences were higher than the pediatric outpatients; pediatric outpatients group had higher mean scores of color preferences than pediatric inpatients group. Although this observation was not statistically significant, it raised the question of whether the sickest pediatric patients respond differently to color than healthy children do.

Gender effects indicated that girls preferred red and purple more than boys do. Regardless of gender effects, healthy children and pediatric patients preferred blue and green the most and white the least.