Physical Work Environment: Testing an Expanded Model of Job Satisfaction in a Sample of Registered Nurses

Djukic, M., Kovner, C., Budin, W., Norman, R.
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Key Concepts/Context
Retaining an adequate registered nurse (RN) workforce is critical for hospitals because it ensures delivery of quality patient care. The impact of personal, organizational, and economic factors on nurses’ job satisfaction has been extensively studied, however very few studies examined the effect of physical work environment, including perceptions of architectural, interior design and ambient features on job satisfaction. Rebuilding of U.S. hospitals without considering the impact of physical environment on RN job satisfaction, threatens to worsen RN turnover. Previous research shows that RNs generally perceive their physical work environment negatively, and that perception is linked to lower job satisfaction. The study aimed to test an expanded conceptual model of job satisfaction that includes a measure of perceived physical work environment.

Methods
The study used a cross-sectional, predictive design and a web-based survey instrument adapted from Kovner (2009) to collect data from 260 RNs in a large metropolitan hospital. The survey comprised of 34 questions about multiple job satisfaction determinants, including 18 Likert-type measures. The independent variable, physical work environment, was measured with Moos (1994) nine-item Physical Comfort subscale of the Work Environment Scale (WES) to assess nurses’ subjective evaluation of physical work environment.

Findings
- No effect of physical work environment on job satisfaction was found.
The majority of respondents did not agree that the interior design in their workplace created a cheerful or warm work climate, had a contemporary appearance, or an optimal furniture arrangement and affirmed that workplace needed redecoration.

Most of the RNs perceived their workplace to be crowded, with suboptimal ventilation and temperature regulation.

Little over half the RNs rated lighting at their workplace positively.

Variables from the baseline model that were positive and significant predictors of job satisfaction in the studied sample were autonomy, supervisor support, workgroup cohesion, working in a unit other than ICU, step-down unit or general medical-surgical unit, and number of hours of voluntary overtime worked in a typical work week.

Although physical environment related positively to job satisfaction, in a regression model no effect of the work environment on job satisfaction was found.

**Limitations**

Author identified limitations included:

- The response rate of slightly less than 50% and inability to establish the presence of differences between responders and non-responders limits generalizability of the findings to the target population. Generalization of the findings is also limited by studying RNs in only one hospital.
- The studied sample was generally younger and had a higher percent of baccalaureate prepared, Black non-Hispanic, and Asian RNs than is found in general U.S. RN population.
- The physical environment measure used in this study had lower than desired internal consistency reliability and two items loaded poorly in construct validity analysis. Suboptimal reliability and construct validity of the measure contribute to increased measurement error, which decreases likelihood of obtaining significant findings.
- Due to the research design used in the study, causality of the discussed significant correlations cannot be established.