



## KEY POINT SUMMARY

### OBJECTIVES

Researchers sought to understand unique attributes of the intensive care unit work environment and their impact on the psychological well-being of staff.

## The psychological impact of the workplace environment in critical care A qualitative exploration

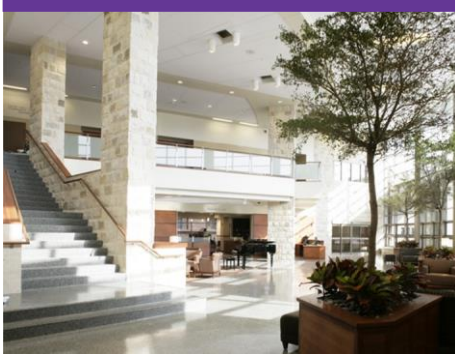
Grailey, K., Leon-Villapalos, C., Murray, E., Brett, S. J. 2021 | Human Factors of Healthcare, Volume 1, Page(s) 100001

### Key Concepts/Context

Researchers acknowledge the intersection of cultural and environmental elements of intensive care units and resulting staff perceptions of those elements. Single patient rooms, varying levels of visibility, and workflow issues are just a few of the environmental conditions that have an impact on clinical staff. The results of this qualitative study include suggestions to modify the work environment to mitigate negative staff perceptions.

### Methods

The study reported here described one section of a larger project. The focus of this article was specific to the intensive care unit (ICU) work environment and the effects on clinical staff well-being. Researchers interviewed nurses (11), physicians (16), and physiotherapists (3) from three units within one United Kingdom trust about the ICU work environment. Researchers with clinical backgrounds used the constant comparative method throughout data collection to determine initial themes and thematic saturation. Audio files were transcribed and qualitative analysis software (NVivo) was used for thematic analysis. Researchers first familiarized themselves with the data and applied initial coding. They then re-reviewed the data in the context of the job demand control model. Ten percent of the transcripts were coded by different researchers to establish interrater reliability and promote trustworthiness of findings. Any coding differences were addressed through discussion with the entire research team. Finally, the manuscript was written using universally accepted guidelines for qualitative research reporting (Standards for Reporting Qualitative Research).



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## Findings

Researchers identified several themes from the interview data. Key themes listed included staffing, physical factors (unit layout and infrastructure), shift patterns, senior support, and resource availability, but each was not distinctly highlighted in the narrative. The authors instead presented the findings using the job demand control model, and referred readers to a supplemental data file for supporting information.

Job demands included staffing, physical characteristics of the unit, and perceived lack of control. Staffing issues included not only a lack of adequate personnel, but also the toll not enough personnel and lack of experience had on more senior staff who routinely stepped in to fill voids. Staffing also affected unit operations in the included units because nurses had to routinely move patients to different rooms in order to accommodate staffing limitations. The units referenced in the interviews included both multi-bed bays and single occupancy rooms. Participants noted benefits and challenges with both layouts. Multi-bed bays allowed for greater coworker visibility and communication, but increased workloads would occur if patients being cared for by colleagues were of high acuity. Single patient rooms led to feelings of isolation, but also supported focus, fostered perceptions of control over work, and mitigated interruptions. Both staffing and built environment issues contributed to perceived lack of control that resulted in staff feelings of inadequacy, frustration and stress.

Staff interviewed were positively influenced by their work environment when they perceived control over their job demands, could access assistance when needed, were able to reduce stimulation, and had designated time and physical space to maintain social relationships among members of the care team.

## Limitations

The first limitation regarding this study was that the model used in the analysis and in the presentation of findings was not represented graphically to assist the reader in interpreting the information. Secondly, the sample was from a single region in the United Kingdom. Thirdly, participants who consented to interviews may have been biased by negative experiences. Finally, validated tools were not used to measure staff perceptions. The findings do, however, inform future research.



## Design Implications

Design recommendations from this study focus primarily on ensuring that physical structures are maintained and that there is visibility among team members to mitigate stress and improve communication. A final suggestion is to include dedicated staff space to maintain working relationships among care team members.

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