



RESEARCH IN A SNAP

OVERVIEW

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Academy of
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RESEARCH DESIGN
CONNECTIONS

Knowledge Repository News

Among the nearly 70 new entries in the Knowledge Repository, several papers focus on staff mental health, and specifically, staff burnout. A preprint study by Blake and colleagues out of the UK explores the impact of “Wellbeing Centres,” an early intervention during the COVID-19 pandemic to help address the tremendous psychological toll on healthcare workers in the NHS. These centers were separate from the staff break rooms and lounges, and included high quality rest spaces with support from “wellbeing buddies” trained in psychological first aid. Results showed that staff found these “sanctuary” spaces to be critical to their wellbeing during the first surge of the pandemic, and hoped that the centers would remain a standard provision at all hospital trusts. Another study by Gola and colleagues in Italian hospitals found that even a short amount of time in nature was beneficial for clinical staff dealing with stressful health emergencies early in the pandemic. Find these citations and others on this topic listed in the COVID-19 and Experience categories below.

(Papers published ahead of print “in press” will be updated as volume and page information becomes available.)

March - April 2021

COVID-19

1. Blake, H., Gupta, A., Javed, M., Wood, B., Knowles, S., Coyne, E., & Cooper, J. (2021). COVID-Well Study: Qualitative evaluation of supported well-being centres and psychological first aid for healthcare workers during the COVID-19 pandemic. *Preprints.Org*, preprint
2. Gola, M., Botta, M., D'Aniello, A. L., & Capolongo, S. (2021). Influence of nature at the time of the pandemic: An experience-based survey at the time of SARS-CoV-2 to demonstrate how even a short break in nature can reduce stress for healthcare staff. *HERD: Health Environments Research & Design Journal*, in press. <https://doi.org/10.1177/1937586721991113>
3. Heneghan, C., Spencer, E. A., Brassey, J., Plüddemann, A., Onakpoya, I. J., Evans, D., Conly, J. M., & Jefferson, T. (2021). SARS-CoV-2 and the role of airborne transmission: A systematic review. *F1000Research*, 10, 232. <https://doi.org/10.12688/f1000research.52091.1>
4. Pease, L. F., Wang, N., Salisbury, T. I., Underhill, R. M., Flaherty, J. E., Vlachokostas, A., Kulkarni, G., & James, D. P. (2021). Investigation of potential aerosol transmission and infectivity of SARS-CoV-2 through central ventilation systems. *Building and Environment*, in press. <https://doi.org/10.1016/j.buildenv.2021.107633>



5. Ronca, S. E., Sturdivant, R. X., Barr, K. L., & Harris, D. (2021). SARS-CoV-2 viability on 16 common indoor surface finish materials. *HERD: Health Environments Research & Design Journal*, in press. <https://doi.org/10.1177/1937586721991535>
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7. Thadhani, R., Willetts, J., Wang, C., Larkin, J., Zhang, H., Fuentes, L. R., Usvyat, L., Belmonte, K., Wang, Y., Kossmann, R., Hymes, J., Kotanko, P., & Maddux, F. (2021). Transmission of SARS-CoV-2 considering shared chairs in outpatient dialysis: A real-world case-control study. *MedRxiv*, preprint. <https://doi.org/10.1101/2021.02.20.21251855>

Experience

Perceived Quality of Care (Noise, Communication, Waiting, etc.)

8. Andersson, M., Fridh, I., & Lindahl, B. (2019). Is it possible to feel at home in a patient room in an intensive care unit? Reflections on environmental aspects in technology-dense environments. *Nursing Inquiry*, 26(4). <https://doi.org/10.1111/nin.12301>
9. de Lima Andrade, E., da Cunha e Silva, D. C., de Lima, E. A., de Oliveira, R. A., Zannin, P. H. T., & Martins, A. C. G. (2021). Environmental noise in hospitals: A systematic review. *Environmental Science and Pollution Research*, in press. <https://doi.org/10.1007/s11356-021-13211-2>
10. Engwall, M. (2021). Patients' self-reported recovery after an environmental intervention aimed to support patient's circadian rhythm in intensive care. *HERD: Health Environments Research & Design Journal*, 17. <https://doi.org/10.1177/19375867211001541>
11. Fu, V. X., Oomens, P., Merkus, N., & Jeekel, J. (2021). The perception and attitude toward noise and music in the operation room: A systematic review. *Journal of Surgical Research*, 263, 193–206. <https://doi.org/10.1016/j.jss.2021.01.038>

Supportive Design (Social Support, Distractions, Nature, etc.)

12. Bayramzadeh, S., & Aghaei, P. (2021). Technology integration in complex healthcare environments: A systematic literature review. *Applied Ergonomics*, 92. <https://doi.org/10.1016/j.apergo.2020.103351>
13. Curlin, J., & Herman, C. K. (2020). Current state of surgical lighting. *The Surgery Journal*, 4(2), e87–e97. <https://doi.org/10.1055/s-0040-1710529>
14. Dubé, M., Laberge, J., Sigalet, E., Shultz, J., Vis, C., Ball, C. G., Kirkpatrick, A., & Biesbroek, S. (2021). Evaluations for new healthcare environment commissioning and operational decision making using simulation and human factors: A case study of an interventional trauma operating room. *HERD: Health Environments Research & Design Journal*, in press. <https://doi.org/10.1177/1937586721999668>



15. Gao, C., & Zhang, S. (2021). Inpatient perceptions of design characteristics related to ward environments' restorative quality. *Journal of Building Engineering*. <https://doi.org/10.1016/j.jobbe.2021.102410>
16. Guevara, D. (2021). Specialty space: Breast care centers. *HERD: Health Environments Research & Design Journal*, in press. <https://doi.org/10.1177/1937586721990563>
17. Hansen, E. K., Bjørner, T., Xylakis, E., & Pajuste, M. (2021). An experiment of double dynamic lighting in an office responding to sky and daylight: Perceived effects on comfort, atmosphere and work engagement. *Indoor and Built Environment*, in press. <https://doi.org/10.1177/1420326X21991198>
18. Jellema, P., Annemans, M., & Heylighen, A. (2019). Foregrounding the built environment in the experience of cancer care: A qualitative study of autobiographical cancer narratives. *European Journal of Cancer Care*, 28(6). <https://doi.org/10.1111/ecc.13156>
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Safety

29. Colman, N., Dalpiaz, A., & Hebbar, K. B. (2020). Simulation enhances safety evaluation in the design of new healthcare facilities. *Current Treatment Options in Pediatrics*, 6(3), 214–225. <https://doi.org/10.1007/s40746-020-00202-7>
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Infection Prevention/Control

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Care across the Lifespan

Therapeutic Environments: Behavioral/Mental Health

39. Jenkin, G. L. S., McIntosh, J., & Every-Palmer, S. (2021). Fit for what purpose? Exploring bicultural frameworks for the architectural design of acute mental health facilities. *International Journal of Environmental Research and Public Health*, 18(5), 2343. <https://doi.org/10.3390/ijerph18052343>
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Pediatric

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Elders/Aging

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Cognitive Impairment & Dementia

49. Kolberg, E., Pallesen, S., Hjetland, G. J., Nordhus, I. H., Thun, E., & Flo-Groeneboom, E. (2021). Insufficient melanopic equivalent daylight illuminance in nursing home dementia units across seasons and gaze directions. *Lighting Research & Technology*, in press. <https://doi.org/10.1177/1477153521994539>
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51. Leung, M.-Y., Wang, C., & Famakin, I. O. (2021). Integrated model for indoor built environment and cognitive functional ability of older residents with dementia in care and attention homes. *Building and Environment*, 195, 107734. <https://doi.org/10.1016/j.buildenv.2021.107734>

Aging in Place/Healthcare at Home

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Building Systems & Technology

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Design & Evaluation (e.g., Process, Methods, Simulation Modeling)

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