WELL building: Key design features for office environments

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ABSTRACT
This study aims to explore the key design features that support office building occupants from the adverse effects on health, well-being, and productivity (i.e., the three aspects in the WELL Building Standard). To achieve that aim, the objectives are to (1) identify the key design features that support health, well-being, and productivity; (2) compare the key design features; and (3) analyze the interrelationships between the key design features. Information from a systematic literature review and semistructured interviews with 23 office building occupants was used to develop a questionnaire survey consisting of 33 design features. Mann-Whitney U test, Kruskal-Wallis H test, normalized mean score ranking technique, overlapping analysis, and Spearman's correlation analysis were used to analyze 206 valid responses. The findings highlighted 11 key design features that simultaneously support office building occupants' health, well-being, and productivity. The design features are air quality, clean drinking water, comfortable artificial lighting, adjustable workstation, comfortable temperature, sufficient space, security system, safety at parking lots, cleanliness, efficiency in building services, and safe design. From these, the last six key design features are absent from the existing WELL Building Standard. The study findings provide new insights into the body of knowledge on WELL building. Industry practitioners can use the findings in designing, planning, and maintaining office buildings that support health, well-being, and productivity. Additionally, policymakers can establish an alternative rating tool for evaluating office buildings.

KEYWORDS
Health; Key design features; Productivity; WELL Building; Well-being

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