

The Investigation of Green Building Certification on the Productivity and Mental and Physical Health of Building's Occupants in Tehran, Iran

Authors : Armin Samarghandi, Amirreza Jafari, Mohamad Ghiasi

Abstract : Numerous assertions and some empirical evidence imply that 'green' buildings ought to be more productive and healthier (mentally and physiologically) than conventional structures. Since then, empirical data has been equivocal, indicating either that the studies are inaccurate or that the research has just scratched the surface of green buildings in offices, accommodation, and hospital settings and not taken the aforementioned holistically. This study compared four green-certified buildings -one residential green building, one green hospital, and one green school- with conventional structures in Tehran, Iran, by means of a questionnaire spread among those utilizing these buildings, and assessing their productivity and health rate as opposed to the time they resided, worked in conventional buildings. The results demonstrated higher scores pertaining to productivity and physical and mental wellness as a consequence of better indoor environmental quality (IEQ), natural lighting, design, and sustainability of these buildings against non-green buildings. In addition, ancillary matters - environmental, financial, intellectual, emotional, social, and spiritual dimensions of participants- were indirectly evaluated, and the same results were produced.

Keywords : green building, LEED, productivity, physical and mental health, indoor environmental quality

Conference Title : ICSBDBT 2022 : International Conference on Sustainable Buildings Design and Building Technologies

Conference Location : Montreal, Canada

Conference Dates : August 08-09, 2022