Abstract

The aim of this study was to determine the impact that Indoor Environmental Quality (IEQ) design features of green buildings, have on specific organisational outcomes. The organisational outcomes investigated were physical wellbeing, psychological wellbeing, productivity, absenteeism and job satisfaction. These outcomes were investigated within two different green buildings, belonging to a large financial institution, situated in Johannesburg and Durban.

Self-report questionnaires were distributed to employees via email inviting them to participate in the study. The questionnaires contained the Warwick-Edinburg Mental Wellbeing Scale (WEMWBS), the Sick Building Syndrome (SBS) questions, and single-item questions measuring productivity and job satisfaction. Actual absenteeism records were obtained of the participating sample from the organisation. Measures were taken before the participants moved into each of the green buildings and 12 months post occupancy in the green buildings. Measures of a comparison group that did not move into either of the green buildings were also taken at the same time periods. The final sample consisted of 175 participants.

The results of this study illustrated significant differences in physical wellbeing and productivity of the participants in the green building situated in Durban. Both these measures increased 12 months post occupancy in the green building. The IEQ design features that were found to most significantly impact wellbeing and productivity within the two green buildings were lighting and air conditions.

This research is important as there is a growing movement towards implementing green building design initiatives, however in order to be truly effective, the benefits of green building designs must extend beyond the benefits to the environment and also consider the benefits to its occupants (Heerwagen, 2000).