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A structural regression model for relationship between indoor air quality with dissatisfaction of occupants in education environment

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Abstract

This paper analysis the effects of indoor air elements on the dissatisfaction of occupants in education of environments. Tries to find the equation model for increasing the comprehension about these affects and optimizes satisfaction of occupants about indoor environment. Subsequently, increase performance of students, lecturers and staffs. As the method, a satisfaction questionnaire (SQ) and measuring environment elements (MEE) was conducted, 143 respondents at five classrooms, four staff rooms and five lectures rooms were considered. Temperature, air velocity and humidity (TVH) were used as independent variables and dissatisfaction as dependent variable. The hypothesis was tested for significant relationship between variables, and analysis was applied. Results found that indoor air quality presents direct effects on dissatisfaction of occupants and indirect effects on performance and the highest effects followed by temperature. These results may help to optimize the quality of efficiency and effectiveness in education environments.

Keywords

Author Keywords: dissatisfaction; indoor air quality; [temperature](#); humidity; air velocity; education environment

KeyWords Plus: PRODUCTIVITY; PERFORMANCE; SATISFACTION; COMFORT; WORK

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