Biophilic Design in Semi-outdoor Environment at Workplace

Does the thermal realm matter?

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MULTISENSORY VR SYSTEM

EXPERIMENTAL SET-UP & PROCEDURE

CONCEPTUAL OVERVIEW

Human Parameters
Human-VR Interaction
Environmental Parameters

RESULTS

METHODOLOGY

Human Parameters

Human-VR Interaction

Environmental Parameters

CONCEPTUAL OVERVIEW

Cognitive Test
Viva-Idioma
Harma-RitCam
Dynamic Skinny

Temperature (°C)

26
27
28
29

Humidity (％)

30
35
40
45

EXPERIMENTAL SET-UP & PROCEDURE

MULTISENSORY QUALITY OF NATURAL EXPERIENCE

WORKPLACE OFFICE BUILDING DESIGN

RESEARCH AREA

BRIEF PROJECT EXPLANATION

The experience of nature can bring various psychological benefits, including restoration of attentional capacity, improvement in psychological well-being, and mood enhancement. However, research on the restorative properties of workplace environments has largely been focused on visual pleasure, overlooking other sensory modalities.

The current study aims to investigate the restorative benefits of thermal pleasant experiences in an office environment, focusing on the adaptive opportunity for mood improvement. The study bridges the research fields of thermal comfort, mood improvement, and psychological restoration. The implementation of biophilic design principles to incorporate various forms of natural elements in workplaces is expected to improve productivity and psychological well-being.

The experimental setup consists of two scenarios: Sunlight only and Sunlight + Shade. The experiment was conducted in a semi-outdoor environment with actual semi-outdoor space appended to an office located in Melbourne Australia. These findings suggest that thermal environmental conditions of an actual semi-outdoor space can contribute to the restorative properties of workplace semi-outdoor environments.

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The study examines the restorative benefits of thermal pleasure experiences in the context of workplace semi-outdoor environments. A pre-and-post-test experiment was conducted to compare the restorative effects of a workplace semi-outdoor space presenting two connected to workplaces. The study bridges the research fields of thermal comfort, mood improvement, and psychological restoration. The implementation of biophilic design principles to incorporate various forms of natural elements in workplaces can improve their occupants' productivity and psychological well-being.

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