

MindFlow: A Collective Intelligence-Based System for Helping Stress Pattern Diagnosis

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Abstract : We present the MindFlow system supporting the detection and the diagnosis of stresses. The heart of the system is a knowledge synthesis engine allowing occupational health stakeholders (psychologists, occupational therapists and human resource managers) to formulate queries related to stress and responding to users requests by recommending a pattern of stress if one exists. The stress pattern diagnosis is based on expert knowledge stored in the MindFlow stress ontology including stress feature vector. The query processing may involve direct access to the MindFlow system by occupational health stakeholders, online communication between the MindFlow system and the MindFlow domain experts, or direct dialog between a occupational health stakeholder and a MindFlow domain expert. The MindFlow knowledge model is generic in the sense that it supports the needs of psychologists, occupational therapists and human resource managers. The system presented in this paper is currently under development as part of a Dutch-Japanese project and aims to assist organisation in the quick diagnosis of stress patterns.

Keywords : occupational stress, stress management, physiological measurement, accident prevention

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