24th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems

Psychosocial risk management

Ana Fernandes[a], Margarida Figueiredo[b], Liliana Ávidos[c], Jorge Ribeiro[d], Dinis Vicente[e], José Neves[c,f], Henrique Vicente[a,f]*

[a]*Departamento de Química, Escola de Ciências e Tecnologia, REQUIMTE/LAQV, Universidade de Évora, Évora, Portugal*
[b]*Departamento de Química, Escola de Ciências e Tecnologia, CIEP, Universidade de Évora, Évora, Portugal*
[c]*Instituto Politécnico de Saúde do Norte, CESPU, Portugal*
[d]*Instituto Politécnico de Viana do Castelo, Rua da Escola Industrial e Comercial de Nun'Álvares, Viana do Castelo, Portugal*
[e]*Escola Superior de Tecnologia e Gestão de Leiria, Instituto Politécnico de Leiria, Leiria, Portugal*
[f]*Centro Algoritmi, Universidade do Minho, Braga, Portugal*

Abstract

A number of guidelines for *Psychosocial Risk Management* in organizations have been proposed in recent decades; however, some reviews on the subject also highlights that the terms *Stress* and *Psychosocial Risks* (*PRs*) are not mentioned explicitly in most pieces of legislation, leading to lack of clarity on the terminology used. To improve the way of dealing with this type of vulnerability and to allow organizations to successfully manage *PRs*, this work proposes and characterizes a workable problem-solving method in which the *PRs* can be evaluated for the entropy they generate within the organization. The analysis and development of such a system is based on a series of logical formalisms for *Knowledge Representation and Reasoning* that are grounded on *Logic Programming*, complemented with an *Artificial Neural Networ*k approach to computing.

* Corresponding author. Tel.: +351-266745315; fax: +351-266745303.
   E-mail address: hvicente@uevora.pt