

# Factor analysis of the psychosocial risk assessment instrument

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## Abstract

The purpose of this paper is to present the results of the application of exploratory factor analysis to demonstrate that factors external to the organization influence the outcome of the Evaluation of the level of psychosocial risks. The variables corresponding to external factors are obtained from the Social Determinants of Health Model of the World Health Organization (WHO). These measurement tools are used for companies with a high number of workers, so a large amount of data is generated. The elements included in the construct validation are: the Kaiser-Meyer-Olkin (KMO) sample adequacy measure, Barlett's sphericity test, the communalities, the explained variance percentages, the matrix of factor structure components, the graph of sedimentation and the matrix of rotated components. As a result, we obtain that external factors have a significant impact on the assessment of the level of psychosocial risks. The external variables found are: education, health care services, housing conditions, means of transport, living conditions.

Keywords:

External factors, Factor analysis, KDD, Principal component analysis, Psychosocial risk assessment instrument, Reduction of dimensionality