Abstract Title:


Autor name(s): PhD Erg. Eduardo Cerda¹, Msc Erg. Carolina Rodriguez², Erg. Giovanni Olivares ³, Erg. Alvaro Besoain⁴.

Affiliation, Country: ¹,²,³,⁴ Ergonomics and Biomechanics Laboratory, Kinesiology Department, Medicine Faculty. University of Chile.

Introduction: The aim of this research is to analyze tasks, variables and develop Manual Material Handling Assessment Risk Model related with Dynamic and Asymmetric Tasks in Construction Sector considering specific variables.

Practice Innovation, Source and findings: The results describe the requirements to develop methods with valid construct to assess this type of task. The variables that have association with this type of tasks determine the pattern of task, and consequently define the approach to develop the model presented in this research.

The construct model consider the following stages: Systematic Process Classification, Requirement of Technical Information, Systemic Analyses, Variables Identification, Task Analyses, Ergonomic Index Global - Partial and Specific Risk Factor Evaluation. This process is design to obtain the evaluation of variables: Weight, Frequency, Combination of Techniques, Combination of Posture, Combination of Coupling, Perceived Exertion and Handling Difficult.

Discussion: The requirements to Manual Material Handling Risk Assessment Model related with Dynamic and Asymmetric Tasks in complex sectors consider a process focused in macro and micro approach assessment. Further, in this process is relevant to know characteristics of system and variables specifics of task: load, frequency, techniques and postures combined, coupling, effort perception and difficulty handling.

Finally, this Manual Material Handling Risk Assessment Model proposes a lineal equation based in the Niosh Equation Approach, considering the specific variables mentioned that presented evidence of association in this research with dinamic and asymmetric manual material handling tasks.

References:


