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Physical Workload Assessment Using Chamoux Method Simulated at Workplace Environment Laboratory

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Abstract: The metabolic load or energy expense is a measure of physical effort performed during any work execution, so it is one of the main components that make up the working conditions, whose intensity is influenced by the physical work level required in some environmental conditions. The muscles require blood, and therefore the heart must provide greater flow, which means increase the heart rate according with the work demands. The purpose of this study is evaluating physical load during the tasks development at the Simulation Work Environmental Laboratory of the UANL University. In the present research, we used Chamoux methodology that is based on heart rate in order to assess cardiovascular effort of the participants at the Simulator Practices of the career Industrial Engineer with minor in Management. This study allowed us to know if there was a physiological maladjustment or contrary if the job does not require enough effort. At the end the participants implemented some corrective actions order to balance the workload and prevent risks such as physical fatigue and stress.

Keywords: Physical workload, Heart Rate, Chamoux Method, Fatigue