



Descriptive Study About Job Strain Index, Physical Activity and Eating Habits Among Employees of a Mexican Manufacturing Industry

Aidé Maldonado-Macias¹(✉), Margarita Ortiz-Solís¹,
Oziela Daniela Armenta-Hernández², Jorge Luis García-Alcaraz²,
and Yolanda Baez Lopez³

¹ Department of Industrial and Manufacturing Engineering,
Universidad Autónoma de Ciudad Juárez,
Ave. del Charro 450 Norte, 32310 Cd. Juárez, Chihuahua, Mexico
amaldona@uacj.mx, all64439@alumnos.uacj.mx

² Department of Electrical Engineering and Computing,
Universidad Autónoma de Ciudad Juárez,
Ave. del Charro 450 Norte, 32310 Cd. Juárez, Chihuahua, Mexico
all64612@alumnos.uacj.mx, jorge.garcia@uacj.mx

³ Department of Industrial Engineering, Universidad Autónoma de Baja
California, Calzada Universidad 14418, 22390 Tijuana, Baja California, Mexico
yolanda@uabc.edu.mx

Abstract. This article offers a descriptive study about job strain index, physical activity and eating habits among workers in a Mexican manufacturing company. The Job Content Questionnaire JCQ Survey, the Food Craving Questionnaire-Trait and the short questionnaire for the measurement of habitual physical activity were applied. The sample includes 128 participants. Results found acceptable Cronbach's alpha values for all different surveys. The following results were obtained: a job strain index greater than one was found in 41.41% of the sample. In the sample 39.84% are obese. About eating habit dimensions, the highest means were found for anticipation of the positive reinforcement which can result from eating, and for lack of self-control towards food. As for the physical activity dimensions, all the mean values found for work index, sports index and leisure time index show low physical activity or sedentarism among participants.

Keywords: Manufacturing industry · Job strain index · Physical activity
Eating habits · Obesity