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## Article Relationship between Burnout and Body Mass Index in Senior and Middle Managers from the Mexican Manufacturing Industry

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Abstract: This research relates Burnout Syndrome (BS) with the Body Mass Index (BMI) among middle and senior managers of the Mexican manufacturing industry. Even though BS incidence is high in the Mexican industrial population, few systematic studies have explored BS and its relationship with other health problems, such as obesity. The goal of this research is to determine the relationship between BS and the BMI in employees with normal weight, overweight, and obesity. We present three structural equation models to relate BS and the BMI. The BMI ranges were determined according to the parameters (normal weight, overweight, and obesity) proposed by the World Health Organization (WHO). The sample includes 361 employees that voluntarily answered a 31-item questionnaire. We measure the levels of BS using the Maslach Burnout Inventory–General Survey (MBI-GS) and analyze anthropometric and sociodemographic data from the participants. Then, we determine the relationships between the variables through structural equation models and estimate the direct, indirect, and total effects in the three models, which show acceptable reliability. As main findings, the normal weight model has a larger explanatory power than the overweight and obesity models. The same research hypotheses were tested and the effects of BS on the BMI differ across the three models. Such results are presented by taking into account that obesity and overweight require additional factors, such as genetic factors and personal eating habits, to be better explained.

Keywords: occupational stress; BS syndrome; normal weight; overweight; obesity

## 1. Introduction

Burnout syndrome (BS) directly affects people. It is generally defined as a feeling of deterioration, progressive exhaustion, depletion of energy, and loss of motivation. According to Freudenberger [1], BS affects overall attitudes and behaviors, which is why it is an important research topic. Most of the research conducted in Mexico explores BS and occupational stress among healthcare professionals [2,3]. Only a few studies in Mexico have been conducted to understand better BS incidence and its consequences in industrial environments. For instance, Medellín [4] explored BS in the automotive industry, whereas Aguirre, Medellín, Vázquez, Gutiérrez, and Fernández [5] studied the relationship