

Predictors of Resilience by Factorial Analysis

L. Martinez^{1,2}, V. Torres², S. Noriega^{1,2}, A. Valles¹, and J. Hernández²

¹Program of Doctor of Science in Management
National Autonomous University of México -UNAM-Ciudad Universitaria, México

²Department of Industrial and Manufacturing Engineering,
Ciudad Juarez Autonomous University, Ciudad Juárez, Chih., México

Corresponding author's E-mail: snoriega@uacj.mx

Author Note: Luis Martinez is full time professor at UACJ, consultant in twin plants. Ph.D. Student at UNAM.

Abstract: The global economy is now characterized by a progressive complexity, uncertainty and volatility, which exert intense pressures to all sort of organizations and confronts them, with increasing frequency, to disruptive and unexpected events. Some organizations respond increasing the capacity to anticipate, absorb and adapt to the effects and recuperation after the changes, by means of the creation and development of resilience. This paper is about the development of a structural equation model to explain the creation of organizational resilience. Research began with the literature search of the resilience factors, with that information was developed a questionnaire for the determination of those factors in several industrial sectors. The questionnaire was validated with the Cronbach alpha index and then was applied in a sample of manufacturing companies of the twin plant industry of Ciudad Juarez, México. The information gathered was analyzed using Factorial Analysis (FA), the factors were identified and developed the model. The first section presents the background and the description of the problem, followed by the literature review and the methodology. The section of results describes the model and in the last one, the conclusions are discussed.

Keywords: Resilience, Adaptation Force, Structural Modeling