

# **Establishing A Comparative Best Effort Physical Performance and Physio-Behavioral Pain Component Baseline For Use In A Functional Restoration Program**

*Authors:*

Bruno Kovacic RN, BS, CECD (Certified Ergonomic Compliance Director);

BioFunction LLC

Debra Safcik RN, BS, COHN-S (Certified Occupational Health Nurse Specialist);

BioFunction LLC

Robert Sussman MD, Board Certified Occupational Medicine & Family Practice Physician;

The Medical Corner Inc.

## ABSTRACT

**Objective:** To establish a comparative best effort physical performance and physio-behavioral pain component baseline for use in an evidence-based functional restoration program.

**Design:** Two separate prospective blinded cohort studies were conducted the first of which examined the robustness of various physical performance assessment systems and then studied 219 chronic pain subjects to compare best effort work capability [employability] to their disability impairment ratings. The second study examined 58 test subjects, including 4,795 discomfort and 3,039 behavioral test samplings, to determine how to properly classify and analyze physio-behavioral pain components.

**Results:** A *poor correlation* was found between the subject's disability impairment ratings and best effort work capabilities demonstrated during criterion-based physical performance testing, with more than 43% of subjects meeting their full duty job requirements. Most chronic pain subjects, previously thought to be "irreparably" totally disabled, could also achieve greater functional improvement through the use of discomfort and behavioral factorization.

**Conclusions:** Due to the complexities involved in quantifying, correlating and authenticating best effort physical performance, the effects of pathology, discomfort and physio-behavioral pain components it seems inconceivable to establish an evidence-based functional restoration baseline without the use of criterion-based work simulation testing and computerized factorization of discomfort and behavioral patterns.