

**IMPROVING OCCUPATIONAL SAFETY & HEALTH INTERVENTIONS:  
A COMPARISON OF SAFETY SELF-EFFICACY & SAFETY STAGES OF CHANGE**

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**(ABSTRACT)**

For people aged 44 and under, the primary cause of loss of life in the U.S. is not due to heart disease or cancer, but to something as common as injuries (U. S. Bureau of Labor Statistics, 1998). As such, injuries kill more than 142,000 Americans and require an estimated 62.5 billion dollars in medical attention each year (U. S. Bureau of Labor Statistics, 1998).

Although there have been numerous studies in the field of worksite health promotion, less research has focused on developing guidelines on improving the effectiveness of industrial safety. Many studies have demonstrated how to increase particular safety-related behaviors like using hearing protection, how organizational factors lead to occupational injuries, and how conceptual frameworks can prevent injuries. However, little research provides the safety practitioner with guidelines on how to increasing the effectiveness of an occupational safety intervention.

This study contributes to the safety literature by addressing the current void of intervention effectiveness research by: a) adapting two safety perception instruments based on widely used theories/models (i.e., self-efficacy and stages of change), b) assessing the surveys' predictive validity in estimating employee involvement in a behavior-based safety process, and c) suggesting strategies for improving intervention effectiveness.

The safety surveys created had respectable reliability, strong face validity, and some predictive utility. Suggestions regarding predictive validity were supported in that each scale (safety self-efficacy, safety outcome expectancy, and safety stages of change) separately predicted a significant proportion of variance in the involvement variables (i.e., participation and number of observations). Multiple regression analyses were performed to assess which scales accounted for most variance in employee involvement (i.e., employee participation and number of observations). The results of the regression analyses suggested that safety stages of change was more predictive and accounted for more unique variance in the employee involvement variables than either safety self-efficacy or safety outcome expectancy. Limitations and suggestions for further research are discussed.