

# Chapter 43

## Role of Self–Efficacy and Collective Efficacy as Moderators of Occupational Stress Among Software Development Professionals

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### ABSTRACT

*Emergence of new professions and novel approaches to work contribute to newer causes of occupational stress. The current study focuses on one such emergent group namely, the software development professionals. An attempt has been made to examine the role of self-efficacy, collective efficacy and perception of control in the study of occupational stress. The data was collected from 156 software development professionals in India. Variables such as self-efficacy, collective efficacy and perception of control using multiple moderated regression revealed that these variables moderate the negative consequences of stress with respect to work exhaustion, organizational commitment and intent to turnover but not with respect to job satisfaction. The results indicate that self-efficacy and collective efficacy have to be strengthened in order to mitigate the negative consequences of stress. The knowledge pertaining to causes of stress can empower individuals and organizations to plan effective stress management interventions.*

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## **INTRODUCTION**

Stressors are situations and circumstances at work which are interpreted as threatening and which can lead to negative emotional reactions. Reaction to stress varies from individual to individual depending on the extent to which the individual perceives the situation or environmental stressor to be actually a stressor as well as based on his or her ability to control. The need to study on impact of stress has become more important since there is an increasing preoccupation with stress in work place (Collin & Gibbs, 2003). This is supported by Horwitz (2010) who indicated that workplace stress is an increasing global phenomenon. In addition, Lu et al. (2011) point out that occupational stress is a major problem affecting not only employees but their families as well as the organisations and the society at large.

Stress has been found to be an important causal agent in health problems such as coronary heart disease, gastro-intestinal malfunctions, dermatological problems, serious nervous conditions, insomnia and increased levels of destructive stress hormones, post traumatic disorder, suicide and other physical problems (Jex & Beehr, 1991; Ramachandrumi, et al., 2004; Karen et al., 2006; Kivimak et al., 2006; Wang, 2007). Literature on occupational stress has proposed that though stressors in the work environment lead to negative psychological, physical and behavioral changes in the individual employee (Jex & Beehr, 1991; Kahn & Byosiore, 1992) these are buffered to the extent that individuals who believe that they are capable of managing difficult and demanding situations. Software Development Professionals are under severe stress because their job is highly time-bound, client centered and technology intensive. This is in addition to such as diverse changing, technology, client interaction, fear of obsolescence, long working hours and workload (Rashidi & Jalbani, 2009). Thus, it provides an incentive to study on them.

## **THEORETICAL BACKGROUND**

Recent occupational stress research has explored the role of moderators in stress-strain relationships (e.g., Srinivasan, 1988; Parkes, 1990; Heinisch & Jex, 1998; Jex & Elacqua, 1999). Among them, studies that have given prominence to self-beliefs have demonstrated that stressors are less detrimental when individuals have more positive self-perceptions (Jex & Bliese, 1999). One type of self-belief that has received relatively little attention in the occupational stress literature is self-efficacy (Jex & Gudanowski, 1992; Schaubroeck & Merritt, 1997; Jex & Bliese, 1999) and collective self-efficacy (Jex & Gudanowski, 1992; Jex & Bliese, 1999; Schaubroeck et al., 2000). Self-Efficacy need to be applied to occupational stress because (a) they are likely to have an impact on the way in which employees cope with stressors at the workplace (Stumpf et al., 1987; Leiter, 1991; Jex & Bliese 1999), (b) they influence individuals' preference for various types of work environment and (c) they determine perceptions of situations as stressors.

Efficacy beliefs are of various types. Belief concerning oneself is called self-efficacy, whereas beliefs concerning one's team or group is called collective efficacy. Self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required in order to attain designated types of performances" (Bandura, 1986) while self-efficacy outcome expectancy is defined as a "judgment of the likely consequence ... behavior will produce" (Bandura, 1986).

According to Bandura (2003) collective efficacy is referred as group members' shared belief in joint abilities in performing and producing attainment. In addition, it is said to measure the perceptions of group's performance as well as the efficacy of interaction among each member (Jex & Bliese, 1999; Lent, Schmidt, & Schmidt, 2005). In comparison, Stajkovic et al. (2009) referred it as group potency.

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