Chapter 6.6
An Empirical Investigation of Stress Factors in Information Technology Professionals

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ABSTRACT

This study explores whether organizations can employ job design strategies to relieve organizational stress for information technology (IT) professionals. The effect of flexible work schedule, employee support and training, and telecommuting as potential coping resources to relieve stress were studied. Perceived workload, role ambiguity, work facilitation, and decision latitude were drawn from previous studies as potential stressors of IT professionals. Perceived stress was measured by two commonly used measures: work exhaustion and depressed mood. The results suggest that removing role ambiguity and improving work-facilitation ease work-related stress. Allowing employees to have flexible work schedules was also found to ease their perceptions of workload. Employee support and training strategies were found to influence decision latitude and role ambiguity. Telecommuting did not have any effect on the stressors. Results also indicate that the association between work exhaustion and depressed mood was stronger for males than females.

INTRODUCTION

Although the current favorable conditions in the labor market has somewhat mitigated the past acute shortage of IT professionals, recruiting and retaining qualified IT workforce continues to be an important endeavor for many organizations (Ang & Slaughter, 2004). The ability to retain valuable technical staff has been recognized as a critical factor for an organization in attaining its

strategic goals (Agarwal & Ferrat, 1999; Agarwal & Ferratt, 2000; Ang & Slaughter, 2004; Moore, 2000). This study is based on the premise that by improving the work environment of IT professionals, organizations will be able to recruit and retain qualified personnel leading to improved organizational performance. For purposes, "IT professionals" is an umbrella term used to include a variety of employees who work within an IT department of a company including information systems developers, technical professionals, managers, and support personnel. The current study draws from well-established organizational stress research and proposes verification of an individual stress model in the IT context to prescribe organizational strategies to reduce stress. It attempts to first identify the stressors that appear to be most relevant in the IT context and then explores the usefulness of potential coping resources.

THEORETICAL FOUNDATIONS

Factors that cause job-related stress in general and specifically in the context of IT profession-als, have been studied previously (Ivancevich, Napier, & Wetherbe, 1983; Moore, 2000; Weiss, 1983; Sethi, King, & Quick, 2004). Two contrasting theoretical frameworks guide organizational stress research. The demand-control model of occupational stress asserts that a combination of high job demands and low job decision latitude will lead to negative physical-health outcome (Karasek & Theorell, 1990). In a contrasting approach, the effort-reward imbalance model emphasizes the reward rather than the control structure of work (Siegrist, 1996). Self-regulation theory, in addition to the contrasting approaches mentioned above, emphasizes the processes of striving for personal success as a basis for understanding human behavior, functioning, and well-being (Maes & Gebhardt, 2000).

While there are rich multi-theoretic perspectives of organizational stress, some recent researchers feel that in spite of strong connections between dimensions of the work place, stress, and job satisfaction, there is no generally accepted theory of stress to enhance the conceptual understanding of these relationships (Fairbrother & Warn, 2003). Sullivan and Bhagat (1992)

Figure 1. Research model showing the stress-factors perceived-stress relationship
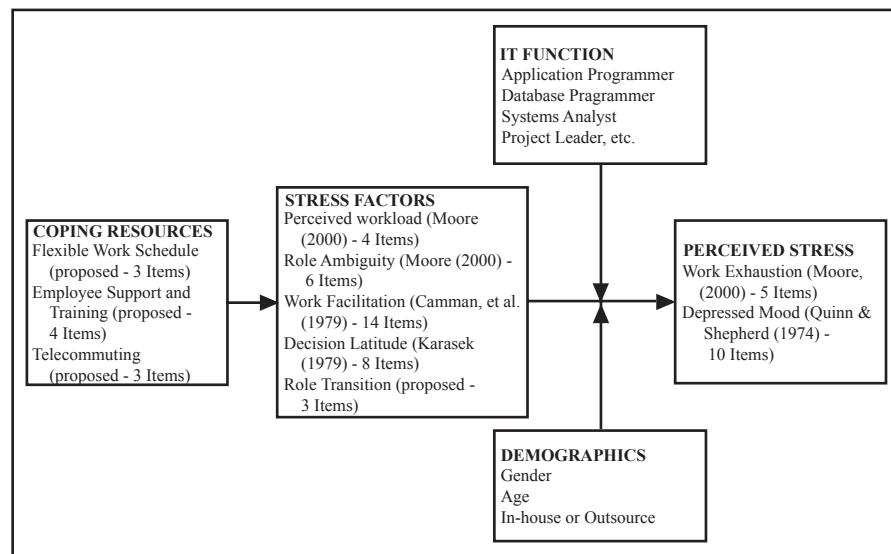
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