

Chapter XXIX

Coping with Information Technology

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ABSTRACT

New information technology implementations, as major modifications to existing ones, bring about changes in the work environment of individuals that trigger an important adaptation process. Extant research on the adaptation process individuals go through when a new IT is implemented in their working environment is rather limited. Furthermore, variance theories and models useful to explain IT adoption and use are not well suited to study the dynamics underlying the adaptation process. Coping theory, because it links antecedents, adaptation behaviors, and outcomes altogether, provides a rich lens through which we can study individuals' IT-related adaptation process. A better understanding of this process will enable researchers and practitioners to understand and predict IT acceptance and related behaviors and thus to better manage them. This chapter presents coping theory, its underlying assumptions and inherent components, discusses its application, highlights the complementarities with existing models and theories currently used in IS research, and provides several avenues for future research in this area.

INTRODUCTION

The extant literature suggests a growing interest in how users behave when new information technologies (IT) are implemented in their work environment (Barki, Titah, & Boffo, 2007; Beaudry & Pinsonneault, 2005; Majchrzak, Rice,

Malhotra, King, & Ba, 2000; Poole & DeSanctis, 1990; Tyre & Orlikowski, 1994; 1996). This growing interest comes from the acknowledgement that current variance theories and models, while useful to explain antecedents of IT adoption and use, do not contribute to explain the adaptation process through which individuals go when a new

IT is implemented in their working system and disturbs their work routine.

Psychologists have been studying individual adaptation to disruptive events in various contexts for decades (Lazarus, 2000). Coping theory (Lazarus, 1966) has been developed to explain the dynamics underlying individuals' appraisal and reactions to disruptive episodes in their life. It has since been used to understand individuals' responses to a large array of events ranging from natural disasters (Baum, Fleming, & Singer, 1983), injuries (Billings & Moos, 1984), deadly disease and mourning (Folkman, Lazarus, Gruen, & DeLongis, 1986; Folkman & Moskowitz, 2000), to disruptions in organizational contexts such as layoffs (Leana, Feldman, & Tan, 1998), organizational downsizing (Shaw & Barrett-Power, 1997), and firms' mergers and acquisitions (Cartwright & Cooper, 1996b).

The overall objective of this chapter is to provide a broad understanding of coping theory and its applicability in IS research. In this perspective, a description of the theory and its inherent components will be followed by a review of IS studies that have used coping theory. This stream of research will next be linked to current research approaches used in the field highlighting their complementarity. The chapter ends on a discussion of several avenues for future research.

COPING THEORY

In psychology, there are three main models of coping (Folkman, 1992). The ego-psychology perspective considers coping as an unconscious adaptive defense mechanism that manages instinct and affect, reduces tension, and restores an individual's psychological equilibrium (White, 1974). Defense mechanisms are structured hierarchically in terms of their maturity, and coping is one of the most mature adaptive processes along with sublimation, suppression, and humor. In the personality perspective, coping is a personality

trait that reflects an ability to effectively face environmental challenges (Grasha & Kirschenbaum, 1986). Therefore, an individual's coping behavior can be predicted by one's coping trait, disposition, or style (Folkman, 1992). Examples of research in this stream include innovativeness (Kirton, 1976) and locus of control (Rotter, 1966). Both models, although useful for understanding some individual behaviors, have important limitations and have received, over the years, mixed support from empirical studies¹.

The contextual model of coping, which is the one discussed in this chapter, has received most attention and is widely used and accepted in psychology. In this perspective, coping is defined as "the cognitive and behavioral efforts exerted to manage (reduce, minimize, or tolerate) specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Folkman et al., 1986; Lazarus & Folkman, 1984). Internal demands are personal desires or requirements that the environment must meet such as an individual's desire to get challenging work versus the challenges that a specific job effectively carries (French, Rodgers, & Cobb, 1974). External demands emanate from the environment and must be met by individuals. They are related to the roles one has to play in a given environment (e.g., organization, society), such as a secretarial position requiring a typing speed of 50 words per minutes versus the effective typing ability of a candidate. Coping serves two main functions: managing the issue that is causing the discomfort and maintaining a psychological and emotional equilibrium (Folkman, 1992; Lazarus & Folkman, 1984; Mechanic, 1974). In the contextual perspective, coping is studied in relation to particular situations or events, perceived as positive or negative, occurring in the individual's environment. This allows for a wide range of patterns as individuals can interpret similar situations differently or different situations similarly and also because an individual's coping acts can vary in different contexts and over time. Hence,

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