Chapter IV

The Role of Personal Goal and Self-Efficacy in Predicting Computer Task Performance

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ABSTRACT

Computer task performance is an essential driver of end user productivity. Recent research indicates that computer self-efficacy (CSE) is an important determinant of computer task performance. Contrary to the significant interest in understanding the role of CSE in predicting computer task performance, little attention has been given to understanding the role of personal goal (PG), which can be as powerful as or more powerful than CSE in predicting and determining computer task performance. Employing CSE and PG, the present research develops and validates a theoretical model that predicts individual computer task performance. The model was tested using PLS on data from an intensive software (Microsoft Excel) training program, in which 41 MBA students participated. Results largely support the theorized relationships of the proposed model and provide important insights into how individual motivational beliefs influence computer skill acquisition and task performance. Implications are drawn for future research and practice.
INTRODUCTION

Computer task performance is a major contributor to end-user productivity. Most organizational activities are becoming increasingly dependent on computers and computer-based information systems (IS). The expected productivity gains from the use of IS cannot be realized unless users are equipped with the requisite computer skills. Many people experience substantial difficulty in learning to use computers (Carroll & Rosson, 1987; Landauer, 1995; Wildstrom, 1998) and often abandon or underuse multi-million-dollar computer-based systems due to their lack of ability to use the systems effectively (Ganzel, 1998; McCarroll, 1991). IS researchers have long recognized computer training as one of the critical factors responsible for ensuring the success of end-user computing (Bohlen & Ferratt, 1997; Cheney, Mann, & Amoroso, 1986; McLean, Kappelman, & Thompson, 1993; Nelson & Cheney, 1987). A recent industry survey shows that 99% of U.S. organizations teach their employees how to use computer applications (Industry Report, 2001). Understanding the key mechanisms that govern computer skill acquisition and task performance is a critical issue that has a significant impact on daily employee functions, return on IS investment, and ultimate organizational success.

Prior research examined a number of individual variables by which computer learning and task performance could be predicted. (Bostrom, Olfman, & Sein, 1990; Evans & Simkin, 1989; Marcolin, Munro, & Campbell, 1997; Martocchio & Judge, 1997; Webster & Martocchio, 1992). Lately, an increased focus on the variables related to computer learning and task performance has included a construct called computer self-efficacy (CSE), perception of one’s capability to use a computer. In addition to being an important variable that influences an individual’s decision to accept or use information technology (Compeau & Higgins, 1995b; Hill, Smith, & Mann, 1987; Taylor & Todd, 1995; Venkatesh, 2000), CSE has been found to significantly influence task performance in various training settings (Compeau & Higgins, 1995a; Gist, Schwoerer, & Rosen, 1989; Johnson & Marakas, 2000; Martocchio & Dulebohn, 1994).

Contrary to the significant interest in understanding the role of CSE in predicting computer learning and task performance, little attention has been given to understanding the role of personal goal (PG), which is defined as the performance standard an individual is trying to accomplish on a given task (Locke & Latham, 1990). Goal setting theory (Locke & Latham, 1984, 1990) views the constructs of both PG and self-efficacy as key determinants of task performance that have powerful direct and independent effects. In various studies conducted outside of the computer training domain, PG has been found as powerful as and, in many cases, more powerful than self-efficacy in predicting task performance (Bandura & Cervone, 1986; Earley & Lituchy, 1991; Locke & Latham, 1990; Mitchell, et al., 1994; Wood & Locke, 1987). The joint effects of self-efficacy and PG on performance indicates that performance is deter-