Social Cognitive Theory in IS Research – Literature Review, Criticism, and Research Agenda

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Abstract. A multitude of research studies have been published investigating individual behavior from the viewpoint of Social Cognitive Theory. We have now reached a point where making sense of such a large number of studies has become a difficult task and where future research efforts must integrate past SCT findings but also express the full potential of SCT in IS research. The aim of the present paper is to organize the literature to provide a clear depiction of the use of SCT in IS research. A review the IS literature which used Social Cognitive Theory of the past 14 years yielded 62 papers that investigated individual behavior using the SCT perspective. This vast literature is mapped into the SCT framework, thus highlighting the main successes but also pitfalls of past research in using the theory. Future research directions are then identified and discussed.

Keywords: Social Cognitive Theory, individual behavior, literature review.

1 Introduction

Since the mid-seventies, the study of the factors leading to the adoption and use of information technology has been largely represented in MIS research, concentrating ever-increasing research efforts. This line of research emerged when both organizations and researchers started realizing that in spite of the immense promises of IT, the level of adoption of information technology did not match by far the level of expectations. Lucas [1,2] was among the first IS researchers to investigate the influence of individual and behavioral factors on IT adoption. The first theory that started providing evidence in the IT adoption cause was the Theory of Reasoned Action [3]. TRA posits that a person's behavioral intention depends on the person's attitude about the behavior and subjective norms. This theory gave birth to one of the most important IS-grounded theories: the Technology Acceptance Model [4,5]. The Diffusion of Innovations (DOI) theory [6] also provided successful insights by providing a complementary view to the IT adoption and use cause [7,8].

Drawn from social psychology, Social Cognitive Theory [9] has been another insightful and widely used theory in IS research. Focusing on individual learning, SCT relies mainly on the assumption that all individual behavior, cognition and other personal factors, and environmental influences operate as interacting determinants.
and influence each other bi-directionally. IS academics started using SCT in the early nineties when realizing the relevance of the concept of self-efficacy (a central notion in SCT) in understanding the use and adoption of information technology. Ever since, SCT has been particularly insightful in IS research leading to numerous findings in the context of computer/software training and use [10,11] but also internet [12,13], electronic commerce-related issues [14,15], and e-learning [16]. However, the importance and success of the notion of self-efficacy in IS studies seem to have progressively reduced the consideration of the other essential SCT concepts leading to the loss of the full potential that SCT has promised in helping understanding individual behavior in IS research.

Past research had already warned researchers about the contradictory and equivocal nature of the results found in IS studies when using the concept of computer self-efficacy [17]. The authors justified their claim by highlighting a “general lack of attention to the dynamic, multileveled, and multifaceted nature of the computer self-efficacy construct” [17]. This research paper strives to strengthen this claim by extending it to the entire framework of SCT.

Based on a thorough literature review of the use of Social Cognitive Theory in IS research, this paper strives to highlight the main findings by mapping the reviewed studies into the SCT framework. By doing so, this theoretical paper reveals key aspects which emphasize direct contradictions between the approach used in certain studies and the core SCT assumptions. Furthermore, unexplored areas are then identified and future research avenues are defined. The study insists on the fact that, in IS research, Social Cognitive Theory has been often reduced to a sub-part of the theory itself: Self-efficacy theory. In addition, the paper posits that by having been used in a restrictive context, SCT has still an unrevealed but promising potential in IS research, justifying the need for clarification of the theory and guidance for future research. Drawing insights from a thorough literature review of the use of SCT in IS empirical studies focusing on individual behavior, this paper is organized as follows. The first section introduces SCT in social psychology and IS research. The research method is described next and is followed by our analyses. The paper concludes with the delineation of the state of our knowledge in a comprehensive framework which allows for the identification of future research directions in the area.

2 Social Cognitive Theory: An Overview

Social Cognitive Theory [9,18,19,20] introduces a model of individual behavior that has been widely accepted and empirically validated in various fields of research, and which focuses on learning experience. SCT was initially used in the context of therapeutic research [21,22], mass media [23,24], public health [25,26] and education [27,28]. Drawing insights from the findings in mass media, marketing was the first branch of business which started using the SCT approach to adopt a different towards the study of customer behavior [29]. Social Cognitive Theory posits that individual behavior is part of an inseparable triadic structure in which behavior, personal factors and environmental factors constantly influence each other, reciprocally determining each other [11] (See Figure 1). Environmental factors are seen as the factors that are physically external to the person and that provide opportunities and social support