Family Work Conflict and Information Security Policy Compliance—An Empirical Study

Emergent Research Forum Papers

Peng Zhang
Florida International University
pzhan005@fiu.edu

Jingguo Wang
University of Texas at Arlington
jwang@uta.edu

Abstract

Using Conservation of Resources Theory (COR), this study investigates burnout's mediating relationship between family-work conflict (FWC) and information security policy noncompliance (ISPNC). We also hypothesize that both self-control and sanction affects ISPNC. In addition, we examine whether self-control and sanction moderate the relationship between burnout and ISPNC.

Keywords (Required)

Conservation of Resources Theory, COR, Information Security Policy, ISP, compliance, family-work conflict, FWC, burnout, sanction, self-control

Introduction

Today's organizations rely heavily on information systems (IS). With the advance of information technology, information systems have virtually become indispensable for almost all organizations (Rainer and Cegielski 2010). IS security, an integral part of IS, is becoming a very important subject of research as the applications of IS become almost ubiquitous nowadays.

To be sure, IS security breaches in recent years are rising very fast and are becoming a huge concern for many companies (e.g. Cavusoglu et al. 2015, Wang et al. 2015). Even though many security breaches make the headlines and draw public attention, the most common types of security breaches are actually resulting from simple human errors such as employees' failing to use password protection for a work laptop which was subsequently stolen (HHS n.d.).

Some scholars (e.g. Parsons and Oja 2014) content that of different prevention measures, employees' compliance to organization's IS security policies is one of the most basic and yet effective measures. Consequently, employees' information system security policy (ISP) non-compliance becomes a particularly important and effective means of protecting organizations' IS. We thus believe it is crucial to study reasons that lead to ISP non-compliance (ISPNC) and our research tries to further our understanding in this field.

Our study makes the following contributions. First, despite its theoretical and logical soundness and empirical significance, researchers have not paid enough attention to the relationship between FWC and ISPNC, and our study tries to bridge this gap. Second, our study is to be conducted in the setting of the healthcare industry. The healthcare industry has attracted much attention in the IS field in recent years due to both the significant role it plays in the national economy and its heavy application of information technology, which makes our research especially meaningful.

Literature Review and Hypotheses Development

Theoretical underpinnings—Conservation of Resources Theory

Conservation of Resources Theory (COR) posits that individuals seek to acquire and maintain resources. Stress is a reaction to an environment in which there is the threat of a loss of resources, an actual loss in

resources, or lack of an expected gain in resources (Grandey and Cropanzano 1999, Hobfoll 1989). Resources include objects, conditions, personal characteristics, and energies. These potential or actual losses of resources lead to a negative "state of being," which may include burnout (Grandey and Cropanzano 1999).

Some researchers argue that COR can be used to explain both family work conflict and work family conflict induced stress. For instance, Grandey and Cropanzano (1999) argue that employees experiencing work role conflict may come to believe that they cannot successfully perform the job. It is reasonable to argue that source depletion can come from family as well. The cognitive resources usually needed to perform well on the job are instead used to manage the stress, leading to poor performance and possible incompetence.

Before we proceed with more in-depth discussions, we first try to clarify several similar and yet related constructs, namely family work conflict, work family conflict, ISPNC, ISP non-compliance below.

Family Work Conflict

We took notice that a few studies that examined ISPNC are originated from organizational commitment literature, because organizational commitment has one dimension of compliance (O'Reilly and Chatman 1986). Some researchers have found that family-work conflict (FWC) leads to lower level of organizational commitment (Balmforth and Gardner 2006) and/or job performance (Karatepe and Kilic 2009). Since ISPNC is a dimension of organizational commitment and can also be a form of job performance, we thus reason that FWC should impact ISPNC, which is the motivation of our current research.

According to Netemeyer et al. (1996), two major types of conflicts exist: work-family conflict and family-work conflict. Whereas the former is a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family-related responsibilities, the latter is a form of inter-role conflict in which the general demands of, time devoted to, and strain created by the family interfere with performing work-related responsibilities.

Job Burnout

Job burnout, according to Cordes and Dougherty (1993), is a type of negative (and often undesired) process or stress which employees experience at the workplace. The widely accepted conceptualization of burnout was developed by Maslach and Jackson (1981), who proposed that burnout has three dimensions: emotional exhaustion, depersonalization and reduced personal accomplishment.

Family Work Conflict and Burnout

Some prior research in role conflicts seems to support that family-work conflict leads to predict burnout (e.g. Brauchli et al. 2011). In addition, research in COR argues that such relationship indeed exists (Grandey and Cropanzano 1999). We thus propose and test the following: *Hypothesis 1: FWC positively affects burnout.*
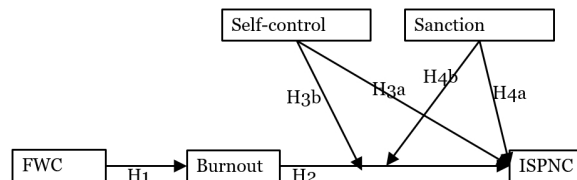

Figure 1: Research Model

Burnout and ISPNC

Many studies have testified that burnout either reduces job performance (Klein and Wareham 2008). In addition, COR theory posits that burnout reduces cognitive resources that are crucial for job performance.

Since complying ISP can be effortful and cognitively demanding, we thus propose the following: *Hypothesis 2: Burnout positively affects ISPNC.*

Self-Control

Self-control originated from the criminology literature. Specifically, we consider dispositional self-control (Tangney et al. 2004a) in our model because this research is concerned with the impacts of ISPNC of a personality trait rather than some idiosyncratic contextual factors. Gottfredson and Hirschi (1990) first developed the concept in criminology to explain why people commit crimes. Relating to workplace behaviors, Baumeister et al. (2002) described that self-control involves inhibiting, modifying, or overriding spontaneous and automatic reactions, urges, emotions, and desires that would otherwise interfere with goal-directed behavior and impede goal achievement at work. The motivation of using self-control in our current study is that self-control can be a strong predictor of compliance behavior.

Counterproductive Behavior, Self-Control and ISPNC

Marcus and Schuler (2004) defined a term named general counterproductive behavior (GCB), which is typified by the actions of violating the legitimate interests of an organization by being potentially harmful to its members or to the organization as a whole. Grounded on the development of criminology literature, researchers in recent years have tried to explain GCB using the self-control theory. Marcus and Schuler (2004) found that among the many antecedents of GCB, self-control was the strongest predictor. Considering that ISPNC is a form of GCB and self-control predicts GCB, it is logical to postulate that self-control should negatively predict ISPNC. Thus, the following hypothesis is proposed: *Hypothesis 3a: Self-control negatively affects ISPNC.*

Sanction

The deterrence theory has seen wide applications in information systems for the study of different types of violations. Straub and Nance (1990) proposed that sanctions, such as discovery and punishment, would reduce computer abuse (Siponen and Vance 2010).

It is commonly believed that fear of sanction causes employees to comply, although neutralization might lead to non-compliance (Siponen and Vance, 2010). Recent research has added more granularity to the findings. For example, D'Arcy et al. (2009) found that perceived severity of sanctions is more effective in reducing IS misuse than certainty of sanctions. In sum, the developments and refinements in the study of the relationship between sanction and compliance for the past two decades have generally concluded that sanction leads to lower ISPNC. *Hypothesis 4a: Sanction negatively affects ISPNC.*

Self-Control as Moderator

COR posits that individual differences can be treated as resources (Grandey and Cropanzano 1999). People with high resources may not be as bothered by the potential loss of time and energy because they know they can cope with such a loss. In addition, some research has shown that self-control moderates the relationship between some stress-related psychological constructs and workplace deviance behavior. Bolton et al. (2012) found that depersonalization and disidentification lead to CWBs for employees whose levels of self-control are low. Indeed, the lower the level of self-control of the employees, the more likely they will engage in workplace deviance behavior if they are burned out. On the other hand, employees who are high in self-control, even if they are also burned out, might opt either not to conduct workplace deviance behavior or conduct it to a lesser degree because these employees have a higher level of self-discipline which will help them to decide to do the "right thing." *Hypothesis 3b: Self-control moderates the relationship between burnout and ISPNC such that the positive relationship between burnout and ISPNC will be weaker for individuals who are high in self-control.*

Sanction as Moderator

We further propose that sanction also moderates the relationship between burnout and ISPNC in the same way that self-control moderates the relationship. The fear of sanction (Nagin and Pogarsky 2001) not only directly reduces deviant behaviors, it also reduces individuals' motivation of engaging in such

behaviors because with a higher fear of sanction, individuals may withhold the psychological needs of engaging deviant behaviors due to burnout. So when sanction is strong, employees who are burned out still might tend to comply more than when sanction is weak or absent. We thus propose the following: *Hypothesis 4b: Sanction moderates the relationship between burnout and ISPNC such that the positive relationship between burnout and ISPNC will be weaker for employees who perceive high level of sanctions from the organization.*

Measurements

Family-Work Conflict

We used the Family work conflict 5-item scale developed by Netemeyer et al. (1996).

Job Burnout

The job burnout scale is from the widely used Maslach Burnout Inventory (MBI; Maslach and Jackson 1981), a 22-item survey that assesses the three dimensions of professional burnout.

Self-Control

Self-control is measured using Tangney et al. (2004)'s 10-item self-scoring self-control scale.

Organizational Sanction

Organizational sanction is measured using D'Arcy et al. (2009)'s 4-item perceived certainty of sanctions and perceived severity of sanctions scale.

ISPNC

We adopt the scale of AlKalbani et al. (2015) to develop the measurement of ISPNC.

Methods

The study uses cross-section data collected in the field of healthcare. Questionnaires are to be distributed to nurses who are working at several local hospitals.

Conclusion

This study investigates burnout's mediating relationship between FWC and ISPNC as well as whether self-control and sanction predict ISPNC. We further test whether self-control and sanction moderate the relationship between burnout and ISPNC.

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