



# Mapping the nomological network of employee self-determined safety motivation: A preliminary measure in China



Li Jiang<sup>a,\*</sup>, Lois E. Tetrick<sup>b</sup>

<sup>a</sup> School of Business, Soochow University, Suzhou, PR China

<sup>b</sup> Department of Psychology, George Mason University, Fairfax, USA

## ARTICLE INFO

### Article history:

Received 24 August 2015

Received in revised form 9 May 2016

Accepted 10 May 2016

Available online 27 May 2016

### Keywords:

Intrinsic motivation

Autonomous motivation

Self-determination theory

Safety behavior

Introjected regulation

## ABSTRACT

The present study introduced a preliminary measure of employee safety motivation based on the definition of self-determination theory from Fleming (2012) research and validated the structure of self-determined safety motivation (SDSM) by surveying 375 employees in a Chinese high-risk organization. First, confirmatory factor analysis (CFA) was used to examine the factor structure of SDSM, and indices of five-factor model CFA met the requirements. Second, a nomological network was examined to provide evidence of the construct validity of SDSM. Beyond construct validity, the analysis also produced some interesting results concerning the relationship between leadership antecedents and safety motivation, and between safety motivation and safety behavior. Autonomous motivation was positively related to transformational leadership, negatively related to abusive supervision, and positively related to safety behavior. Controlled motivation with the exception of introjected regulation was negatively related to transformational leadership, positively related to abusive supervision, and negatively related to safety behavior. The unique role of introjected regulation and future research based on self-determination theory were discussed.

© 2016 Elsevier Ltd. All rights reserved.

## 1. Introduction

In 2014, there were 298,492 industrial accidents in China, in which 66,093 workers lost their lives (State Administration of Work Safety, 2015). Given these high social and economic costs, the researchers have devoted to workplace safety studies. Safety research illustrates individual unsafe behavior is one of the most direct triggers of accidents (Reason, 1990), and safety motivation was a crucial predictor of safety compliance and participation behaviors among employees (Griffin and Neal, 2000; Vinodkumar and Bhasi, 2010), and safety motivation was even more important than safety knowledge (Neal and Griffin, 2006; Probst and Brubaker, 2001).

Self-determination theory (SDT) offers a multidimensional conceptualization of motivation, allowing for the assessment of both the level and quality of motivation (Gagné et al., 2015; Ryan and Deci, 2000; Sheldon et al., 2003). Although there was a recent study that devoted attention to analyzing the relationship between various motivations and safety behavior (Conchie, 2013), little efforts have been made to validate instruments that measure self-

determined safety motivation (Scott et al., 2014). To our knowledge, the studies that have examined safety motivation's antecedents and consequences have been limited, and no published studies have investigated self-determined safety motivation in China, where safety continues to be a serious concern for employees and their employing organizations.

Previous safety motivation research has focused on the level of employees' safety motivation. Self-determination theory can help advance this line of research by investigating types of motivation (i.e., reasons why employees are motivated to work safely), so that we can better understand the mechanisms that drive safety behavior. The need exists to establish the nature of the relationships between self-determined safety motivation and the constructs theorized to be associated with safety motivation. In the present study, we focus on validating Fleming (2012) measure of safety motivation, which is based on self-determination theory, in a Chinese workplace.

### 1.1. Self-determination theory (SDT)

According to SDT, motivation is the reason underlying one's behavior. The theory is built on the classic distinction between extrinsic and intrinsic motivation (Deci and Ryan, 2000). SDT posits that there are three different categories of motivation that lie along

\* Corresponding author.

E-mail address: [imjiangli@gmail.com](mailto:imjiangli@gmail.com) (L. Jiang).

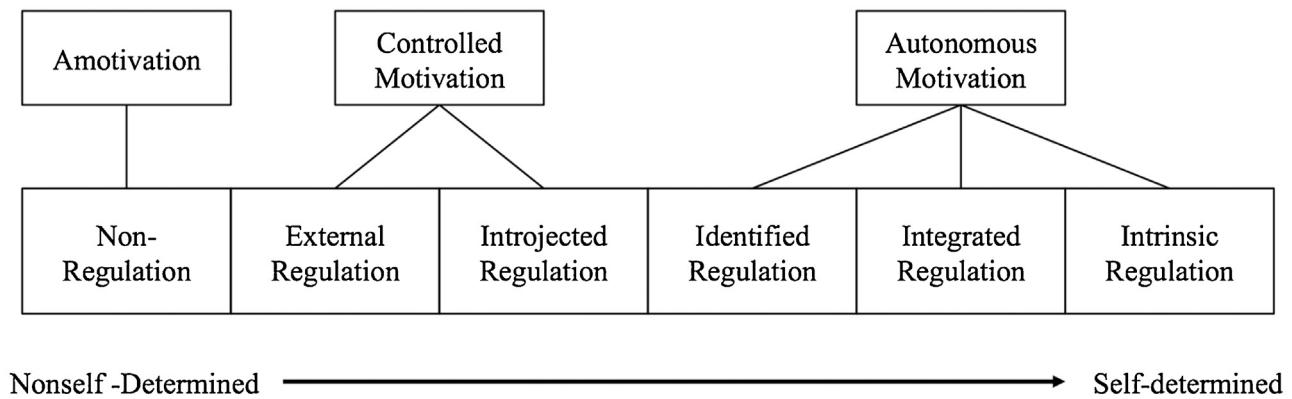


Fig. 1. Types of Motivation.

Adapted from Ryan and Deci (2000).

a continuum of relative autonomy: autonomy motivation, controlled motivation, and amotivation as shown in Fig. 1 with each category of motivation representing distinct self-regulatory styles (Deci and Ryan, 2008).

There are three types of autonomous motivation. One type is *identified regulation* which refers to individuals engaging in a behavior because the action is consciously accepted and valued. When identified regulations are brought into congruence with one's other values and needs, that is they are fully assimilated into the self, integration occurs. This then results in a second type off autonomous motivation called *integration regulation*. Lastly, the most autonomous regulatory style, *intrinsic regulation*, occurs when one is performing an activity for its inherent purposes such as pleasure and satisfaction (Gagné et al., 2010).

Controlled motivation includes two subtypes of motivation: *external regulation and introjected regulation*. External regulation is evidenced when individual's behavior is performed to obtain an external reward or avoid punishment. Introjected regulation refers to behaviors that are performed to avoid feeling guilty or anxious. And introjected regulation occurs when people are motivated to demonstrate ability or avoid failure to maintain feeling of worth (Ryan and Deci, 2000).

Lastly, amotivation refers to the state of lacking motivation. When amotivated, individuals either do not act at all or act without intent.

SDT outlines environmental factors that may influence the quality of individual motivation. SDT defines the basic psychological needs as the nutrients that are essential for human development and psychological health: need for competence, autonomy, and relatedness (Gagné and Deci, 2005). The concept of human needs provide a means of understanding how various environmental factors affect autonomous versus controlled motivation (Deci and Ryan, 2008). The growth oriented nature of individuals (intrinsic motivation and internalization) requires fundamental nutrients (Van den Broeck et al., 2008). Factors that facilitate the satisfaction of these needs lead to the development of autonomous motivations, and those that prevent their achievement lead to low levels of autonomous motivation, leading in turn to various behavioral consequences (Gilbert and Kelloway, 2014; Kovjanic et al., 2012). Therefore, SDT reflects the nomological network surrounding the construct of self-determined safety motivation.

Leadership, as one of various organizational aspects, is considered a crucial environmental variable in the motivation of employees (Kaiser et al., 2008). Autonomy supportive leaders can stimulate employees by satisfying their basic psychological need to develop autonomous motivations (Deci et al., 2001; Kovjanic et al., 2012; Lynch et al., 2005). A controlling and negative lead-

ership style, in contrast, is likely to yield low levels of autonomous motivation (Lian et al., 2012).

In the present study, we chose transformational leadership and abusive leadership as antecedents within the nomological network of safety motivation. We chose these two leadership variables because they have been frequently studied in the literature on safety research (Nahrgang et al., 2011), and they have been found to be significantly related to safety behavior (e.g., Clarke, 2013; Kelloway et al., 2006).

Further, transformational leadership and abusive supervision represent two different sides of leadership styles, one generally considered positive and the other negative. Transformational leadership stimulates individuals' optimal functioning, while abusive supervision may elicit malfunctioning. SDT takes into account both the brighter and darker sides of individuals' functioning. Individual safety behaviors, both safety compliance and safety participation, are triggers of workplace injuries and accidents (Jiang et al., 2010). Thus, we consider safety compliance and safety participation as the consequences of employees' safety motivation in the present study.

### 1.2. Safety-specific transformational leadership and motivation

Transformational leadership comprises four components of leader behaviors, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1997). First, transformational leaders can be regarded as confident and successful role models, who will enhance a sense of competence among their followers (idealized influence). Second, transformational leaders encourage their followers to develop new approaches to efficiently accomplish their work (intellectual stimulation), and they show individual consideration for their followers' opinions and take their perspective into account when making decisions (Bass, 1997). Thus, they offer employees freedom and autonomy in the way they are to execute and fulfill their tasks. Under these conditions, followers are likely to be interested in their tasks (Shin and Zhou, 2003). Empirical studies have shown a positive link between transformational leadership and intrinsic motivation (Charbonneau et al., 2001; Conchie, 2013). Third, transformational leaders are particularly apt to enthuse their followers to the mission and goals of the group (inspirational motivation). They motivate followers through facilitating identification with their work and group by providing positive group vision (Böhm et al., 2015; Herman and Chiu, 2014; Hobman et al., 2011; Huang, 2013), and linking safety values with their personal values (Barling et al., 2002).

In general, transformational leaders emphasize followers' needs and personal development, and encourage them to search for excel-

Download English Version:

<https://daneshyari.com/en/article/571999>

Download Persian Version:

<https://daneshyari.com/article/571999>

[Daneshyari.com](https://daneshyari.com)