ARTICLE IN PRESS

Applied Ergonomics xxx (2015) 1-10



Contents lists available at ScienceDirect

Applied Ergonomics

journal homepage: www.elsevier.com/locate/apergo



Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework

Yueng-Hsiang Huang ^{a, *}, Jin Lee ^{a, b}, Anna C. McFadden ^{a, c}, Lauren A. Murphy ^{a, d}, Michelle M. Robertson ^a, Janelle H. Cheung ^{a, c}, Dov Zohar ^{a, e}

- ^a Liberty Mutual Research Institute for Safety, Hopkinton, MA, USA
- ^b Harvard School of Public Health, Boston, MA, USA
- ^c Clemson University, Clemson, SC, USA
- ^d SHARP Program, Washington State Department of Labor and Industries, Olympia, WA, USA
- ^e Technion Israel Institute of Technology, Haifa, Israel

ARTICLE INFO

Article history: Received 15 May 2015 Received in revised form 8 October 2015 Accepted 9 October 2015 Available online xxx

Keywords:
Safety climate
Job satisfaction
Employee engagement
Objective turnover rate
Social exchange theory

ABSTRACT

Safety climate, a measure of the degree to which safety is perceived by employees to be a priority in their company, is often implicated as a key factor in the promotion of injury-reducing behavior and safe work environments. Using social exchange theory as a theoretical basis, this study hypothesized that safety climate would be related to employees' job satisfaction, engagement, and turnover rate, highlighting the beneficial effects of safety climate beyond typical safety outcomes. Survey data were collected from 6207 truck drivers from two U.S. trucking companies. The objective turnover rate was collected one year after the survey data collection. Results showed that employees' safety climate perceptions were linked to employees' level of job satisfaction, engagement, and objective turnover rate, thus supporting the application of social exchange theory. Job satisfaction was also a significant mediator between safety climate and the two human resource outcomes (i.e., employee engagement and turnover rate). This study is among the first to assess the impact of safety climate beyond safety outcomes among lone workers (using truck drivers as an exemplar).

© 2015 Elsevier Ltd and The Ergonomics Society. All rights reserved.

1. Introduction

Safety climate, the degree to which employees perceive that safety is prioritized in their company (Zohar, 2010), is often implicated as a key factor in the promotion of injury-reducing behavior and safe work environments. Research examining how safety climate can impact non-accident and injury outcomes of workers is underdeveloped as compared to the impact on more traditional safety outcomes (e.g., safety behaviors and accident rates). This study aims to address these gaps in the literature and makes the following contributions: 1) it examines how safety climate perceptions at both the group and organization levels might directly and differentially predict employee outcomes; 2) it

E-mail address: Yueng-hsiang.Huang@Libertymutual.com (Y.-H. Huang).

http://dx.doi.org/10.1016/j.apergo.2015.10.007

0003-6870/© 2015 Elsevier Ltd and The Ergonomics Society. All rights reserved.

examines the mediating effects of job satisfaction between safety climate and two types of human resources outcomes (i.e., engagement and turnover rate); 3) it draws from the social exchange theory as a theoretical basis for the hypothesized relationships; and 4) the study is among the first to assess how safety climate may impact these outcomes (e.g., perceived engagement and objective turnover) for lone workers in an industry (e.g., trucking) where turnover is very high and drivers may not have many opportunities to interact with their coworkers or supervisors.

Most safety climate research thus far has focused on traditional work environments in which supervisors and workers interact regularly under the same roof. Huang et al. (2013) were among the first to extend safety climate research to the population of mobile remote/lone workers (i.e., truck drivers). Based on the etiology approaches of climates (i.e., structural, attraction-selection-attrition, and symbolic interactionist (Schneider and Reichers, 1983)), Huang et al. (2013) found that lone workers, truck drivers in particular, did form safety climate perceptions of their

Please cite this article in press as: Huang, Y.-H., et al., Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework, Applied Ergonomics (2015), http://dx.doi.org/10.1016/j.apergo.2015.10.007

^{*} Corresponding author. Center for Behavioral Sciences, Liberty Mutual Research Institute for Safety, 71 Frankland Road, Hopkinton, MA 01748, USA.

companies and these perceptions have an impact on their safety behaviors and other safety-related outcomes. Huang et al. (2013) suggested that, for example, truck drivers may form their safety climate perceptions based on whether good safety training is provided and how well the truck is maintained in their companies. They may also form their perceptions based on interactions with their supervisors/dispatchers using electronic devices or the telephone. The current study seeks to extend Huang et al.'s (2013) study by examining the impact of safety climate for truck drivers beyond typical safety outcomes.

1.1. Social exchange theory: the impact of safety climate beyond safety outcomes

While the research examining the effects of safety climate on health- and injury-related outcomes has proliferated in recent years, a dearth of information exists on how safety climate may affect employee outcomes beyond injury. The current paper uses social exchange theory (Blau, 1960) as a general framework to explain how employee perceptions of safety climate may lead to employee outcomes other than those traditionally studied regarding safety (e.g., accidents and injuries).

Social exchange theory posits that in interdependent relationships, transactions between parties beget a norm of reciprocity and, possibly, quid pro quo reciprocity (Cropanzano and Mitchell, 2005; Uhl-Bien and Maslyn, 2003). The reciprocity norm (Gouldner, 1960) specifies that favorable treatment received by one party obligates him/her to provide favorable treatment in return. That is, when one party provides a benefit, the receiving party is obligated to respond in kind. The reverse would then also be true; when negative treatment is shown, negative treatment or poor behavior would be reciprocated. As opposed to receiving tangible benefits or commodities in economic exchanges, the rendering of benefits in social exchanges is discretionary (Aryee et al., 2002).

The application of the social exchange theory and the reciprocity norm to organizations has been supported in previous studies (e.g., Eisenberger et al., 1990). For example, the perceptions of organizational support for, and investment in, employees creates an obligation among employees in providing treatment favorable to the organization in return (Dejoy et al., 2004). In other words, employees respond accordingly to how they perceive they are treated by their organization (Mearns et al., 2010). In fact, Dejoy et al. (2010) have found support for the application of social exchange theory in the context of safety climate, such that management commitment to workplace safety functions as part of the social exchange dynamics in that employees were found to react more positively when they perceived greater levels of organizational support for workplace safety.

The connection between safety climate perceptions and management commitment to safety has been grounded in both theoretical reviews and empirical findings. Based on a review article published by Cohen (1977), Zohar (1980) listed multiple characteristics of safe organizations: management commitment to safety, high rank and status of safety officers, emphasis being placed on safety training, open communication between management and workers, frequent safety inspections, good housekeeping and environmental control, a stable workforce, and promotion and recognizing of safety (Cohen, 1977; Zohar, 1980). The current study follows the same argument based on the social exchange theory, such that employees who work in a company with positive safety climate are more likely to perceive organizational commitment to and support for safety as beneficial to their personal well-being. They are also more likely to reciprocate by engaging in safer behaviors, thereby reducing the occurrences of accidents and injuries (Hofmann et al., 2003). In addition to the greater motivation to perform more safely at work, a positive safety climate is also expected to lead to other benefits beyond traditional safety outcomes, such as greater job satisfaction and organizational commitment (e.g., Cropanzano and Mitchell, 2005; Eisenberger et al., 1986; Michael et al., 2005).

In this study, two specific types of employee outcomes were examined: (1) psychosocial factors and (2) human resource outcomes. Job satisfaction was used as the indicator of psychosocial outcomes while employee engagement and turnover were used to represent human resource outcomes.

1.2. Safety climate, job satisfaction, engagement, and turnover connections

1.2.1. Relationships between safety climate and job satisfaction

lob satisfaction is a specific job attitude relating to the reaction an individual has to either their work overall or specific facets of the job (Judge and Kammeyer-Mueller, 2012). Employee job satisfaction has been shown to be an important outcome for organizations as it is related to variables such as performance on the job (Judge et al., 2001; Riketta, 2008) and employee turnover intentions (Tett and Meyer, 1993). Morrow and Crum (1998) were among the first to assess the relationship between safety climate perceptions and job satisfaction and found that railroad workers' perceptions of organizational safety climate were positively predictive of employees' satisfaction. A recent meta-analysis by Clarke (2010) found that individual safety climate perceptions are directly related to employee job satisfaction. The author reasoned that this relationship exists due to the fact that positive safety climate perceptions indicate to employees that a basic need for safety at work is met and may result in their positive feelings toward the job. This is in line with the traditional needs theories (e.g., Maslow, 1954) which postulate that job satisfaction is determined by how well the job or the organization is able to satisfy certain employee needs such as safety.

Additionally, as discussed earlier, employees with positive safety climate perceptions are more likely to perceive support from their organizations as favorable treatment and commitment to their personal well-being. This may then be more likely to create greater motivation to perform safely at work, and also lead to other beneficial outcomes for the organization, such as improved job satisfaction (Michael et al., 2005). Therefore, we propose the following hypothesis:

Hypothesis 1a. Employee safety climate perceptions (both organizational-level and group-level safety climate) that are more positive will relate to higher levels of employee job satisfaction.

1.2.2. Relationships between safety climate and human resource outcomes

The human resource outcomes assessed in the current study have both a subjective and an objective component. Engagement, a subjective component, can be thought of as a persistent and pervasive positive work-related state of mind whereby employees feel vigorous, dedicated, and absorbed in their work (Schaufeli et al., 2002). Job engagement is also conceptualized as a motivational state whereby employees invest their physical, emotional, and cognitive resources into the work role and job performance (Kahn, 1990). While job satisfaction and job engagement are related concepts in that they both have affective dimensions, the two constructs are conceptually distinct. Warr and Inceoglu (2012) differentiate the two based on employee behaviors. Engagement is a relatively active or directed state whereby employees invest resources to attain a goal, whereas satisfaction can be viewed as a more passive feeling about goal attainment.

Download English Version:

https://daneshyari.com/en/article/6947877

Download Persian Version:

https://daneshyari.com/article/6947877

<u>Daneshyari.com</u>