The Role of Person-Environment Fit in Promoting Job Performance: Towards a Conceptual Model and a Research Agenda

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Abstract

In project, production and engineering related and integrated industries, working environmental factors like organizational support have become non-technical drivers of employee performance. Despite of previous studies exploring effects of such factors, a comprehensive framework is still at lack. Following the Stimulus-Organism-Response (S-O-R) paradigm, a literature review has been firstly conducted to explore theories underline previous studies. Job performance is generally regarded as a result of environmental factors, individual characters and generated person-environment (P-E) fit assessments. This paper proposes a conceptual model, described as the Stimulus-Assessment-Performance (S-A-P), considering the mediating role of P-E fit in linking environmental factors and job performance. The developed model and identified factors are beneficial for understanding person-environment interactions and identifying approaches to improve job performance.

Introduction

Job performance has been the central construct in occupational psychology (Viswesvaran and Ones 2000) and even the ultimate goal in organizational management practices (Judge et al. 2001). Theories on job performance can be traced back to the Scientific Management developed by Taylor, providing techniques such as synthesis and standardization to improve efficiency of production process and productivity of workers. "Fordism", a further application of "Taylorism", is famous for high productivity generated by the machine and higher wages provided for workers to keep them finishing works on assembly lines. In the era of "post-Fordism", non-technical factors like organizational culture are believed to be critical to achieve success in project, engineering and production (Bonanno and Constance 2001).

Admitting effects of technical progress and working environment, employee behaviors are naturally affected by emotional reactions encountered in specific conditions (Xiong et al. 2015a). The argument "happier workers produce more" can be dated back to the Hawthorne studies and the human relations movement in 1930s (Brayfield and Crockett 1955). Work stress, another emotional reaction, didn't receive much attention until the prevalence of mental disorders in the 1980s (Tennant 2001). Since then, the nexus between work stress and employee behaviours become an important topic. Job satisfaction and work stress are assessments of two basic P-E fit types in terms of the "needs-supplies" fit and "demands-abilities" fit (Caplan 1987).

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Unlike the Stimulus-Response mechanism dominating most animals, human behaviours applying judgement and analysis ability usually follow the mechanism of Stimulus-Organism-Response (S-O-R) (Mehrabian and Russell 1974). However, previous studies on employee behaviors didn't link the person-environmental fit theory and the P-O-R mechanism. The first objective of this paper is to develop a conceptual model linking the S-O-R process and P-E fit assessments in the context of employee behavior research. The second objective is to propose a research agenda based on the developed model in addition to a review of previous studies.

Towards a Conceptual Model

In this section, this paper aims to establish a framework for employee behavior research by introducing person-environment fit theory into the S-O-R paradigm. A literature will be presented in four aspects as presented in Fig.1, following the order: environmental factors, individual differences, P-E fit assessments and job performance.
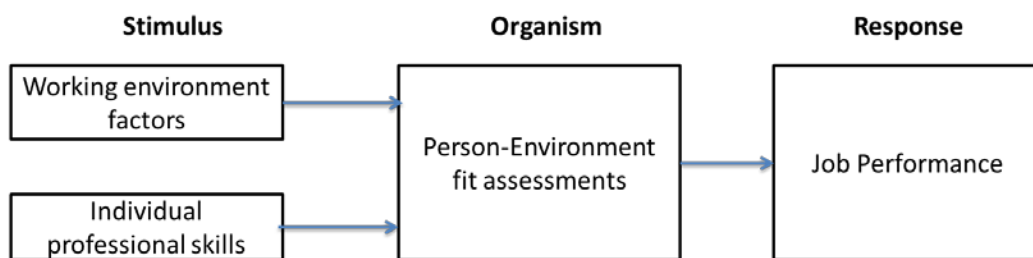

Figure 1. Conceptual model

Working Environmental Factors

Organizational Support (OS)

Performance of employees may change with organizational support, "the extent to which the organization values their contributions and cares about their well-being" (Eisenberger et al. 1986). Rhoades and Eisenberger (2002) conducted a meta-analysis of 70 studies related to organizational support and found employees concern much on beneficial organizational supports including fairness, supervisor support, and organization rewards and enjoyable job conditions. Consistent with the norm of reciprocity, it is found that employees would use hard work and job loyalty to reciprocate organizational support like fair career advancement (Rousseau 1990). Additionally, individual absenteeism is found to be negatively correlate with organizational support (Eisenberger et al. 1986).

Organizational Politics (OP)

The political nature of working environment is not a concept but a fact of life (Ferris and Kacmar 1992). A business company is a political coalition where decisions are not totally decided by the market but also bargaining processes (March 1962). Perceptions of organizational politics are caused by employees' tendency to assign the organization humanlike characteristics (Eisenberger et al. 1986; Rhoades and Eisenberger 2002). Although more political behaviors happened in higher levels in organizations (Ferris and Kacmar 1992), lower level employees face more impacts for lacking the control of organizational processes, which decreased their job satisfaction (Gandz and Murray 1980).

Organizational Learning Climate (OLC)

Consistent with the general definition of organizational climate (Hellriegel and Slocum 1974), organizational learning climate (OLC) can be regarded as a set of attributes on learning of members in organization. Effects of OLC on organizational performance have been widely acknowledged by both academics and practitioners (Mikkelsen and Grønhaug 1999). In addition, OLC is believed to improve organizational learning when individuals or a group of people in an organization face some problems and need helps from the "organization" (Argyris and Schön 1978). Egan et al (2004) examined the relationships of OLC, job satisfaction and organizational performance. It is found that OLC is positively related to job satisfaction and intentions to transferring knowledge among employees. On the other hand, turnover intention was found to be negatively influenced by OLC and job satisfaction.

Individual Differences on Job Knowledge and Skills

Work ability is a comparatively abstract expression reflected in knowledge and skills. Hunter (1986) reviewed hundreds of paper measuring the link between general cognitive ability and job performance in all jobs and found that cognitive ability affect job performance via mediation of job knowledge and most cognitive skills are used in everyday work. Wade and Parent (2002) investigated effects of job skills required job performance of webmasters and found that deficiency in job skills leads to lower job performance.

Person-Environment Fit Assessments

Person-environment fit has different meanings in different situations, including person-organization fit, person-group fit, person-person fit, person-vocation fit and person-job fit (Jansen and Kristof-Brown 2006). As pointed out by Caplan (1987), there are two basic assessments of P-E fit when exploring influences, "one involving the fit between environmental supplies and personal motives, goals, and values and the other involving the fit between environmental demands and personal skills and abilities" (Caplan, 1987: 295-296). Job satisfaction and work stress can be used to assess the two kinds of P-E fit.

Job satisfaction

Job satisfaction is a reaction to the discrepancy between 'How much is there?' and 'How much should there be?' (Nerkar et al. 1996; Wanous and Lawler 1972; Xiong et al. 2014) and is an assessment of "needs-supplies" fit. Following the Hawthorne studies on job satisfaction among employees, research on possible connections between job satisfaction and job performance comprises an appreciable portion of behavior research in management (Organ 1988). This has involved three mainstream hypotheses on the job S-P linkage: (1) job satisfaction causes job performance; (2) job performance causes job satisfaction; (3) or that another complex relationship exists that includes moderators, mediators or antecedent variables. For potential antecedents, job satisfaction positively related with organizational learning climate (Egan et al. 2004).

Work stress

Work stress, indicating the deviations between requirements and actual abilities of people in fulfilling job tasks, has become an important concept in organizational management for the

prevalence of psychological disorders (Tennant 2001). Besides of health issues related to work stress like diastolic blood pressure under stressful working conditions (e.g. Matthews et al. (1987)), exploring antecedents and influences of work stress in managerial context has practical and theoretical implications. For example, social support from co-workers decreases job stress and improves job performance with evidences from a survey of 306 nurses (AbuAlRub 2004). Additionally, co-worker support is found to be a significant moderator for the nexus between job stress and performance with evidences from 305 employees in 48 service organizations, in which higher stress results in better performance if the level of co-worker support is high (Hon 2013).

Job Performance

Review of previous research on job performance uncovers three main kinds of job performance in terms of task performance, organizational citizen behavior and counterproductive work behavior (Viswesvaran and Ones, 2000).

Task performance

Early studies measuring job performance focused on task performance, indicating the extent of employees on completing their professional duties specified in their work descriptions. The task performance is defined as "the proficiency with which incumbents perform activities that are formally recognized as part of their jobs; activities that contribute to the organization's technical core either directly by implementing a part of its technological process, or indirectly by providing it with needed materials or services" (Borman and Motowidlo 1993; Judge et al. 2001; Viswesvaran and Ones 2000). For example, task performance was used in Hawthorne studies exploring linkages between job satisfaction and performance among workers. Leung et al (2005) used work stress to predict the estimation performance (i.e. task performance) of construction cost engineers in Hong Kong.

Organizational citizen behavior (OCB)

Organizational citizen behavior (OCB), assuming job responsibilities, innovation for the benefit of organization without reward expectations (Eisenberger et al. 1990), has been increasingly emphasized in many organizational studies. Organ (1988) proposed that OCB should include five dimensions: altruism, conscientiousness, sportsmanship, courtesy and civic virtue (LePine et al. 2002; Organ 1988). Following this typology, Podsakoff et al (1997) conducted a study on measuring performance in terms of quantity and quality of 218 people working in a paper manufactory and found that altruism and sportsmanship lead to better performance. However, such OCB dimensions are not discriminant significantly in many situations (LePine et al. 2002). Smith et al (1983) pointed out two main kinds of OCB behaviors pointed by are include the generalized compliance indicating conscientious self-disciplined behaviors and the altruism indicating willingness to help others. A positive relationship between organizational support and OCB was figured out by Eisenberger et al (1990). Additionally, Smith et al (1983) found a positive relationship between job satisfaction and altruism behaviors. A meta-analysis of 55 studies on OCB supports that job attitudes and job satisfaction are robust predictors of OCB (Organ and Ryan 1995).

Counterproductive work behavior (CWB)

Counterproductive work behavior (CWB) is the behavior conducted intentionally to harm corporate legitimate interests (Dalal 2005). Such behaviors include property/equipment sabotage, substance abuse and other counterproductive behaviors (Sackett and Wanek 1996). CWB is assumed to share same antecedents with OCB and task performance such as job satisfaction and organizational justice (Dalal 2005). For example, individual cognitive ability is found to negatively affect CWB that workers with higher cognitive ability take considerations before engagements in counterproductive activities (Dilchert et al. 2007). Meier and Spector (2013) found a reciprocal nexus between stressful working conditions and CWB with a longitudinal study of 663 individuals.

S-A-P Model

Based on the S-O-R paradigm and the P-E fit theory, an adapted conceptual model described as Stimulus-Assessment-Performance (S-A-P) has been developed for studying employee behavior as presented in Fig.2. The postulation here is that environmental factors and job ability affect job performance (fully/partially) mediated by P-E fit assessments like Job satisfaction and work stress. In time perspectives, it is reasonable to assume job performance may affect environmental factors and F-E fit assessments in future. For example, increased organization citizen behaviors among employees change previous perceptions of organizational support and politics. Lessons learnt in job tasks can be used to enrich individual knowledge and skills.

Moderators are necessary to be considered when solving complex and unsettled problems (Xiong et al. 2015b). In this developed model, some other variables such as gender, age, perceived job alternatives, reward contingency and individual learning style are worthy to mention for testing potential moderation effects.
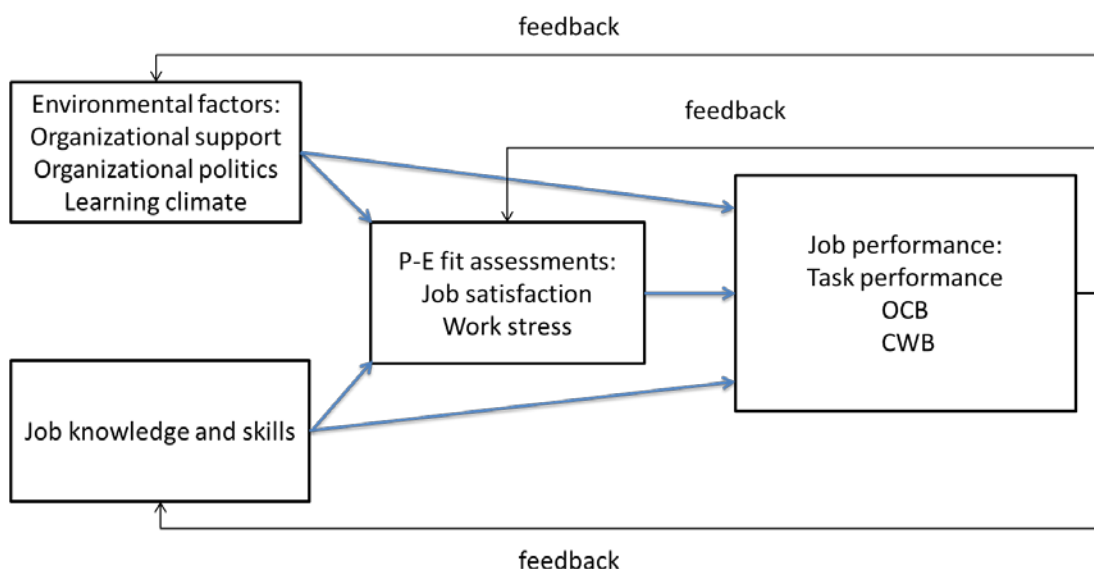

Figure 2. S-A-P model

Discussion and Research Agenda

The S-A-P model linking working environmental factors, individual abilities, P-E fit assessments and job performance are developed based on the S-O-R paradigm and person-environment fit theory. A primary contribution of this model is providing a clear framework

to understand the "big picture" of employee behavior research. The model would also be useful to understand specific contributions of previous studies for researchers and assist in making comprehensive decisions to improve employee performance for corporate managers.

A research agenda is proposed here to investigate studies according to the S-A-P model:

1. Applying the conceptual model to reduce risks of pseudo-causation conclusions.

2. Identifying antecedents and effects of F-E fit has vital implications as well as exploring the feedback effects when taking consideration of time lags.

3. How P-E fit assessments mediate the effects of environmental factors and individual abilities on job performance? It would be interesting to explore whether it is a fully mediation or partial mediation in the real world.

4. It is also worthy to investigate individual ability affects P-E fit assessments in a direct or moderating approach.

5. Which potential moderator matters in these relations? Moderators might vary in different relations. Identifying them and quantifying these effects can make great contributions to the body of knowledge.

It is admitted that this model does not include every concept and need further refinement, but the developed model provides a framework able to adapt with new concepts. Despite of job performance, the developed model can be expanded to other outcomes such as organizational commitment and leave intention. As pointed by Tett and Meyer (1993), job satisfaction is a strong predictor of organizational commitment and employee turnover.

Acknowledgement

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