

THE MOTIVATION OF WORKMANSHIP-INNOVATION ENHANCED BY OCCUPATIONAL PRIDE RESULTS IN AN ACTIVE ATTITUDE TO CARRY OUT SAFETY ACTIONS

Hana OYA¹ and Shigeru HAGA²

¹ Department of Psychology, Rikkyo University, Niiza-shi, Saitama 352-8558 Japan

¹ hanaoya@blue.ocn.ne.jp

² Department of Psychology, Rikkyo University, Niiza-shi, Saitama 352-8558 Japan

² haga@rikkyo.ac.jp

Abstract

Most industrial workers are asked for two requirements: high quality performance on time and carrying out their job in a safe manner. To search for a solution to the conflict, we introduced the concept of occupational pride and constructed a hypothetical Occupational Pride - Safety Actions (OPSA) model employing the Theory of Planned Behaviour (Oya and Haga, 2014). In this study, we expanded the OPSA model with organizational justice and organizational commitment. We conducted a survey with 407 factory workers and through analysis using Structural Equation Modelling we showed the following: (1) organizational justice facilitated both occupational pride and organizational commitment; (2) occupational pride facilitated intrinsic work motivation, that was work motivation of workmanship-innovation (WI), and reduced extrinsic motivation, that of schedule-adherence (SA), while organizational commitment only facilitated intrinsic work motivation; (3) intrinsic work motivation (WI) facilitated an active attitude about safety, that was the safety attitude depending on one's own actions (SOA), which resulted in the intent to perform safety actions. On the other hand, extrinsic work motivation (SA) facilitated a passive attitude about safety, the safety attitude depending on the system (SS). We interpreted the result that occupational pride had a selective inclination towards intrinsic motivation and active attitude, which could change the earnest but dependent minds of workers and become a critical factor to create and sustain resilience.

1 INTRODUCTION

Our research question asked if once a worker takes pride in his/her occupation, would that guide them to safety behaviours in the workplace? Most industrial workers are asked for two requirements: high quality performance on time and carrying out their job in a safe manner. To resolve the worker's conflict, we proposed an Occupational Pride - Safety Actions Model employing the Theory of Planned Behaviour (OPSA Model, Oya and Haga, 2014). The model suggested that occupational pride would restrain unsafe behaviour intention.

In this presentation, we report the results of our latest survey. The aim of this survey was to gather information to expand our previous model by determining the effect of organizational commitment and organizational justice on work motivation, and in turn on safety behaviours.

2 THE OPSA MODEL

2.1 Components and early studies

The OPSA Model was constructed of 7 components: occupational pride, motivation to work, safety attitude, subjective safety norm, perceived behavioural control in safety, intention to carry out safety actions, and safety practice. Each component, except safety practice, was measured by a 5-point Likert scale.

Occupational pride refers to feelings of pride and self-esteem based on one's occupation. The motivation to work refers to "a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration."(Locke and

Latham, 2004).

From among the various definitions for attitude in the literature, Ajzen, the initiator of the Theory of Planned Behaviour (TPB), chose the definition that "Heider's conception of an attitude or sentiment, like our own, concerns positive or negative evaluation" (Fishbein, and Ajzen, 1975, p.35). Safety attitude is the positive evaluation of a pattern of safety behaviour or belief.

The components of subjective norm, perceived behavioural control and intention to carry out actions came from the TPB, which describes that attitude, subjective norm and perceived behavioural control "lead to the formation of a behavioural intention" (Ajzen, 1988). "Subjective norm is the perceived social pressure to engage or not to engage in a behaviour; Perceived behavioural control refers to people's perceptions of their ability to perform a given behaviour; Intention is assumed to be the immediate antecedent of behaviour" (Ajzen, 2015).

Our early studies showed that, after factor analysis, two factors were extracted from the motivation to work. The questionnaire items loaded on one factor included an inclination towards high quality performance and the feelings of competence, e.g., "it becomes my worth to be viewed as an expert in my job and win co-workers' esteem", which we then named the work motivation for workmanship-innovation (WI). The other factor was loaded with items related to job schedule and lag, e.g., "what is important to get done with my assigning task in time, if needed taking a shortcut", which we named work motivation for schedule-adherence (SA).

Also two factors were extracted from safety attitude: safety attitude depending on one's own actions (SOA), and safety attitude depending on the system (SS). The SOA attitude was loaded with items such that a worker would proactively take safety actions, e.g., "the first step of ensuring of safety is my own safety actions". The other, SS attitude, was passive, e.g., "the security commitment is up to the unit in charge".

For perceived behaviour control, there were two factors: control on the environment and control on one's own action. As the work environment pre-exists and constrains workers' action, it would make sense to assume that control on environment would influence control on one's own action.

The index of workers' safety practices was not included in our survey because of limitations in collecting such data.

The initial factor in the model, occupational pride, facilitated WI work motivation and reduced SA work motivation. Regarding the safety attitude of SOA, WI motivation had a stimulatory effect, and SA motivation had an inhibitory effect. The SOA attitude facilitated safety intention directly and indirectly with mediation by perceived behavioural control. The other type of safety attitude, SS, which was facilitated by the SA motivation, showed no significant relationship with safety behaviour intention.

2.1 Expanding the Model

Oya and Haga (2014) suggested that steps might be needed to improve occupational pride in workers in order to carry out safety practice, though it seemed difficult to increase occupational pride directly. Therefore, we introduced two constructs into the OPSA Model: organizational justice as an antecedent for occupational pride, and organizational commitment as an antecedent for work motivation and safety attitude.

Organizational justice refers to people's perceptions of fairness in organizations (Greenberg, 1987), known to be correlated with organizational trust, organizational citizenship behaviour (OCB), lower unethical behaviour in the workplace, and organizational commitment (Greenberg and Colquitt, 2005). It would be reasonable to expect that the perception of organizational justice might sustain employees' esteem for their occupations.

Organizational commitment refers to employees' bonds with their organizations as a result of desire, need and obligation (Meyer and Allen, 1991). There are many publications on the relationship between organizational commitment and attitudes and behaviours in the workplace, and some findings seem stable, such as the effect on job performance (Aranya et al., 1986), while others are contradictory, such as the effect on OCB (O'Reilly and Chatman, 1986; Williamson and Anderson, 1991). We hypothesized that organizational commitment would have a different effect than occupational pride on work motivation and safety attitude, even though their correlation would be high.

3 SURVEY

3.1 Design of survey

We conducted a questionnaire survey with 407 male factory workers (regular employees and foremen). The measurement of occupational pride was based on Rosenberg's Self-Esteem Scale (1965), for the objective of 'I'

in the original scale, we changed the objective into 'my occupation' in our scale, and made an addition of 4 items about the contribution of 'my occupation' to society. The measurements of motivation to work, safety attitude and intention to carry out safety actions were scales made of items which were extracted from the research papers of CRIEPI (Hasegawa et al., 2006; Hasegawa, 2009) and interviews with factory workers. We made scales for measuring subjective safety norm and perceived behavioural control in safety using as a reference the Sample TPB Questionnaire of Ajzen et al. (2015).

3.2 Analysis and result

Analysis using Structural Equation Modelling, of which index of fitness were GFI=.77, AGFI=.75, RMSEA=.05 as the values were relatively low but acceptable, showed the following: (1) organizational justice facilitated both occupational pride and organizational commitment. The correlation between occupational pride and organizational commitment was high; (2) occupational pride facilitated WI work motivation and reduced SA work motivation, while organizational commitment facilitated WI but had no significant effect on SA. WI motivation had a stimulatory effect on the safety attitude of SOA, which resulted in the intent to perform safety actions. SA motivation had an inhibitory effect on the SOA and a stimulatory effect on the SS attitude.

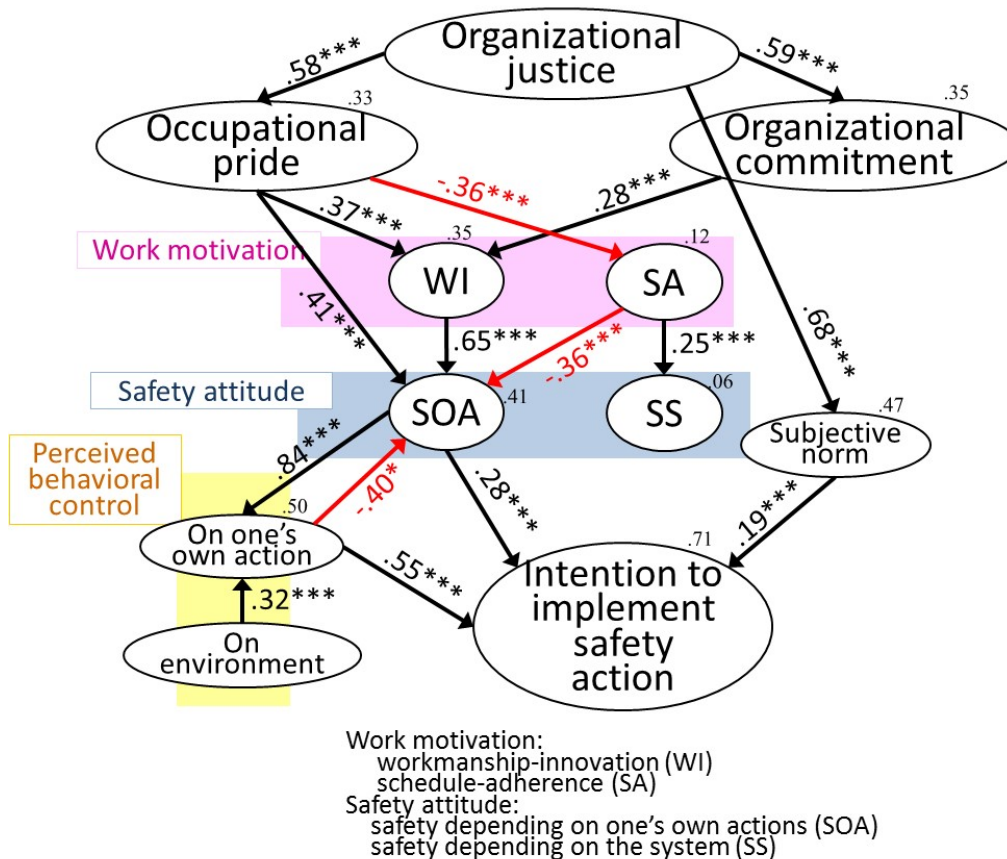


Figure 1. The result of analysis with Structural Equation Modelling for Occupational Pride - Intention to carry out Safety Action Model with Organizational Justice and Organizational commitment. $***: p < 0.001$, $*: p < 0.05$. GFI=.77, AGFI=.75, RMSEA=.05

The number of observation items loaded for each construct was fewer than 5, because items with only a small influence on the target construct resulted in reduced fitness and were omitted. The values of the fit index were relatively low but acceptable

4 Discussion

4.1 Occupational pride, organizational commitment and SA motivation

In Oya and Haga (2014) we demonstrated that occupational pride facilitated both directly and indirectly the SOA attitude; indirectly, occupational pride reduced SA motivation, which reduced SOA attitude. The results of the present analysis suggested that organizational commitment did not have the effect of reducing SA motivation.

What is the nature of SA motivation? Items about the SA motivation were related to job schedule and lag, and were extrinsic by nature. Organization concerns job schedule and avoids lag. If a worker consider his/herself part of his/her organization, and who might get a high-score in organizational commitment, he/she would care about the revealed and/or concealed value of organization. For an employee it is difficult to resist the workplace atmosphere of pursuing schedule adherence, even when it involves an unsafe shortcut.

On the other hand, occupational pride connects the person's own sense of value, therefore he/she would choose how to conduct him/herself more intrinsically.

SA motivation reduced the active SOA attitude and stimulated the passive SS attitude. The passive safety attitude would be harmful because people with this attitude might tend to not think for themselves.

4.2 SS safety attitude

As preparation for unpredictable situations, we might take two approaches. One is to build up an all-encompassing safety-net system containing rules, procedures, sensors and ingenious devices to trust entirely; we would call it safety I, after Dr Hollnagel. The other approach is to think by oneself and respond with situational contingency, which we would call safety II. In the OPSA Model, the first approach is represented by the safety attitude of SS, safety depending on the system, and the second approach is the safety attitude of SOA, safety depending on one's own actions. Workers most often have both types of attitudes.

In this study, we illustrated with the OPSA Model that the SS attitude may not work as readiness for safety actions.

4.3 For resilience

When we must adjust everything we do to match the current conditions for safety II, how can we avoid over-reliance on the given well-conceived system that has been established for safety I? Our study illustrated the functions of occupational pride and organizational commitment in stimulatory/inhibitory effects on two types of work motivation that were antecedents for safety attitudes. Occupational pride had a selective inclination towards intrinsic motivation and active attitude, which could change the earnest but dependent minds of workers and become a critical factor to create and sustain resilience.

Acknowledgements

The work reported in this paper is based on a grant from Grant-in-Aid for Scientific Research (C)no. 24530796.

REFERENCES

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50, 179-211.
- Ajzen, I. (2015). Theory of Planned Behaviour. <http://people.umass.edu/aizen/tpb.html>
- Aranya, N. Kushnir, T. & A.Valency (1986). Organizational commitment in a male dominated profession, *Human Relations*, 39. 433-448.
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research. Reading, MA: Addison-Wesley.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, 12, 9011.
- Greenberg, J., & Colquitt, J., Eds. (2005). Handbook of organizational justice. New Jersey, Lawrence Erlbaum Associates, Inc.
- Hasegawa, N., Hayase, K., & Takano, K. (2006). The Model of Influential Factors Diagram on Organizational Safety: Causal Analysis of Important Factors in the Four Industries Including the Electric Utility,

- Socio-economic Research Center, Human Factors Research Center Rep. No. Y05011.
- Hasegawa, N. (2009). The Study on the Fostering Process of Safety Culture through Organizational Communication, Socio-economic Research Center Rep. No. Y08057.
- Lock, E. A., & Latham, G. P. (2004). What Should We Do about Motivation Theory? Six Recommendations for the 21st Century, *Academy of Management Review* 29, pp. 388-403.
- Meyer, John P., and Allen, Natalie J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, Issue 1, 61–89.
- O'Reilly, C. & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behaviour. *Journal of Applied Psychology*, 71, 492-499.
- Oya, Hana, & Haga, Shigeru (2014). The role of occupational pride in safety actions: Constructing a model of safety actions with the Theory of Planned Behaviour, ICAP2014, symposia to the 28th International Congress of Applied Psychology <<https://b-com.mci-group.com/Abstract/Statistics/AbstractStatisticsViewPage.aspx?AbstractID=184295>>
- Williamson, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviours. *Journal of Management*, 17. 601-627.