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The Psychology of Drivers and Leadership Practices in Predicting Safe Driving

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Abstract

Work-related driving in Australia is a major risk for employers. Many organisations face the challenge of balancing productivity and safety. Considerable attention has been given to risk management practices of organisations. This paper extends previous research by going beyond risk management to understand how bundled human resource management (HRM) practices contribute to developing a safer work environment. Consideration is also given to the extensive research examining individual differences contributing to driving behaviour. In this way, the research aims to understand how senior management and individual drivers interact in the organisational system and how this supports or constrains safe driving behaviour.

Background

This study aims to overcome this gap in the literature by examining the HRM practices operating in organisations employing work-related drivers in Australia. A configuration of HRM practices that is receiving attention in the literature is High Performance Workplace Systems (HPWS). HPWS are defined as a set of distinct yet interconnected human resource management practices. This study will explore the relationship between HPWS and driver behaviour. Furthermore, this study will investigate how HPWS functions together with drivers' individual attributes. Evidence for the importance of understanding the individual-level perspective is drawn from research which demonstrated that the level of control and discretion an employee has in their work impacts the way HPWS is perceived and utilised, which further impacts employees' behaviours and wellbeing (Jensen, Patel, & Messersmith, 2013). Particular attention is paid to attitudes, as attitude strength has been shown to influence decision making. That is, attitudes can contribute to employee discretion and behavioural outcomes.

H1 Positive safety attitudes will have a positive impact on driver behavior.

H2 HPWS will moderate the relationship between attitudes and behavior.

Method

Recruitment of senior managers, occupational drivers and supervisors was facilitated through a government injury database spanning over 13 industries according to ANZIC. Large organisations (500+ employees; n=52; 64%) were more highly represented in the sample compared with small to medium (1-199 employees; n=22; 27%) and large organisations (200-500 employees, n=7; 9%). Three stages of recruitment were conducted, the first stage involved recruitment of senior managers who completed a HPWS questionnaire. The second stage of recruitment involved occupational drivers. A minimum of five drivers were required from each organisation and were recruited to complete a telephone interview completing measures of safety climate, self-efficacy, and attitudes. The final stage of recruitment involved supervisors of drivers. This group was recruited by asking the drivers who completed the interview to identify their supervisors and provide their email address. Emails with an embedded link to an online questionnaire containing the HPWS items were subsequently sent inviting supervisors to participate. This process allowed the research team to

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match individual, supervisor-level and senior management responses in a multi-level structure and maintain anonymity. The final sample consisted of 911 drivers and 161 supervisors from 83 organisations. Multi-level modeling was applied to test three hypotheses in Mplus 7.0. The model nested drivers within a two-level multi-level model, where senior management and supervisor's scores on HPWS represented Level 2 data.

Results

Both hypotheses were supported by outcomes of the multi-level modeling. More positive safety attitudes resulted in improved driver behavior and this relationship was moderated by HPWS. The interaction is graphed in Figure 1.

Conclusions

This demonstrates that attitude strength plays a key role in the uptake of organisational policy and procedure (ie., HPWS). The results also demonstrate the HRM practices are not designed with consideration of the safety of drivers, highlighting senior management's role in the safety of work-related drivers. The key implication of these findings is the need for multi-level interventions, such that, support is found for previously effective individual level interventions (eg., feedback sessions and goal setting exercises) which much be augmented by senior management commitment to safety (ie., designing policies and procedures that support safety).

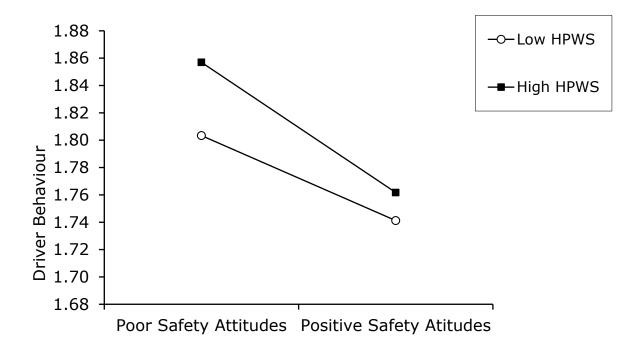


Figure 1. The interaction between attitudes and behaviour moderated by HPWS

References

Jensen, J. M., Patel, P. C., & Messersmith, J. G. (2013). High-performance work systems and job control consequences for anxiety, role overload, and turnover intentions. *Journal of Management*, 39(6), 1699-1724.