The mediating role of demand and control in the relationship between leadership behaviour and employee distress: A cross-sectional study

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ABSTRACT

Background: The relationship between leadership and employee distress is well established, however, the processes involved in this relationship remain largely unclear. For a stretched nursing workforce, understanding in what ways leadership may influence employee distress is particularly important.

Objectives: To examine possible mediating effects of the work environment factors demand and control in the relationship between leadership behaviour in change, production, and employee orientation and employee distress.

Design: Cross-sectional study design.

Settings: The study was conducted at a large county council in Sweden providing both institutional and non-institutional care.

Participants: A random sample of 1249 employees (primarily nurses, but also a wide range of other healthcare professionals and administrative staff), who had a healthcare manager that was about to enter a leadership development programme ($n = 171$), responded to a web-based questionnaire. The response rate was 62%.

Methods: The employees rated their healthcare managers' behaviour in change, production, and employee orientation, as well as their own perceptions of level of demand, control (subdivided into decision authority and skill discretion), and five distress outcomes. Multilevel analysis was performed.

Results: The mediators demand, decision authority, and skill discretion were significant predictors of all five distress outcomes for all three leadership orientations. In eight of 15 regressions, the mediators fully explained the relationships between leadership orientations and outcomes. Four of five relationships with distress outcomes were fully mediated for change-oriented leadership, whereas two of five outcomes were fully mediated for production- and employee-oriented leadership. In all three leadership orientations, the relationship between the mediator skill discretion and the distress measure disengagement were particularly strong, with B-coefficients ($-.44$, $p < .001$) twice as high as for any of the other relationships.

Conclusions: It seems that the way that employees perceive healthcare managers' change-oriented behaviour, and how that aspect is related to employee distress, is primarily explained by perception of demand and control. Furthermore, regardless of leadership

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behaviour orientation, how employees perceive their opportunity to use specific job skills plays an important role in the interplay between perception of healthcare managers' behaviour and disengagement.

What is already known about the topic?

- Leadership behaviour characterised by support and consideration is positively associated with employee well-being, and assessments of the relationship between production-/task-oriented or change-oriented leadership behaviours and employee well-being have provided mixed results.
- The Job Demand-Control model is a well-supported theory of how the work environment affects physiological and psychological health of employees.
- Employee perception of control has been shown to mediate in the relationship between supervisor support and employee job satisfaction.

What this paper adds

- The results suggest employee perceptions of demand and control as mediators in the influential process between leadership behaviour and employees' distress, in particular concerning change-oriented leadership behaviour.
- The findings highlight the interplay between leadership behaviour, employee disengagement and skill discretion.
- Support is provided for a positive relationship between well-being of healthcare employees and change- and production-oriented leadership behaviour, respectively.
- The knowledge base of the processes involved in the relationship between leadership and employee distress is expanded by analysis of change-, production-, and employee-oriented leadership behaviours.

1. Introduction

The psychosocial environment of the workplace comprises a multitude of factors that can be beneficial or detrimental to employee health, and one of the crucial factors determining work-related well-being among employees is related to the quality of leadership. In a recent review of 30 years of research, Skakon et al. (2010) concluded that leadership (e.g. leaders' behaviours and leadership style) was associated with employee well-being. Leadership has been correlated with an array of employee outcome measures, such as ischaemic heart disease (Nyberg et al., 2009), stress (Westerlund et al., 2010), work climate (Malloy and Penprase, 2010), and sick leave and disability pension (Kuoppala et al., 2008). In the field of nursing management, particular interest has been centred on the association between leadership and staff well-being to address the problems of a stretched nursing workforce and an international shortage of nurses (Cummings et al., 2010). In this field, leadership has been shown to be related to well-being outcomes such as burnout (Kanste et al., 2007), job satisfaction (Cummings et al.,

2010; Sellgren et al., 2008) and moral distress (de Veer et al., 2013).

However, the processes involved in the relationship between leadership and employee well-being remain largely unclear (Gregersen et al., 2011; Skakon et al., 2010). It is plausible that these can be clarified by examining the various ways in which leadership can potentially influence well-being in employees. The impact of the leader may be exerted directly on employee well-being, or indirectly in the sense that the leader influences the work environment, which in turn affects the employees (Skakon et al., 2010; Tafvelin et al., 2011). In recent years, the indirect effects of leadership have gained increasing interest through investigations of mediating variables (e.g. Arnold et al., 2007; Munir et al., 2012; Nielsen et al., 2008a). Nonetheless, these studies have focused on transformational leadership, and thus less is known about the processes that link alternative leadership models to employee well-being. Three-dimensional leadership models including production-, employee-, and change-oriented behaviours have been shown to predict various effectiveness outcomes that are well in line with more dominating leadership models, such as transformational and transactional leadership (Michel et al., 2011). Transformational leadership, in combination with certain aspects of transactional leadership, has been positively associated with a multitude of employee well-being outcomes, and this model has emerged to occupy a strong position in leadership research during the last two decades. However, analyses have also indicated that transformational and transactional leadership, in contrast to three-dimensional leadership models, omit leader behaviours of particular relevance to task performance (Michel et al., 2011). In the present study we examined the well-validated model of change-, production-, and employee-oriented leadership behaviours, and the potential mediating effect of the two work environment factors job demand and control (Karasek, 1979) on the relationship with employee well-being.

1.1. Change-, production-, and employee-oriented leadership and employee well-being

In the 1990s, the long-lived conceptual distinction of two broad categories of leadership behaviour – production/task orientation and employee/relation orientation – was extended by adding a third category, change orientation (Ekvall and Arvonen, 1991; Yukl, 1999). *Change orientation* encompasses behaviours such as creating visions, encouraging innovative thinking, and driving change. The change-, production-, and employee-oriented leadership behaviours model (the CPE model) has been validated in both the United States and Scandinavia in a number of studies of samples covering different branches and hierarchical levels