Antecedents and Consequences of Performance Management Enactment by Front Line Managers

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BY FRONT LINE MANAGERS

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ABSTRACT

Although researchers have extensively stressed the critical role of line managers in the effective implementation of HR practices, little is known about what exactly causes managers to enact these practices. In this paper, we draw from signalling theory, theory of planned behavior and social exchange theory to investigate both the antecedents and outcomes of front line management’s enactment of performance management activities. Results from two samples of 731 front line managers and 425 employees, show that line management’s beliefs regarding the usefulness of performance management activities mediate the relationship between HR support and line management’s implicit person theory on the one hand, and performance management PM enactment on the other. This relationship is moderated by the manager’s span of control. Furthermore, line management enactment shows to be positively related to employee engagement and job satisfaction. Finally, we found a substitution effect for line management concern for employees and PM enactment.

Keywords: HRM, performance management, line management, engagement, satisfaction.
INTRODUCTION

The way in which human capital is managed and the degree to which organizations are successful in engaging and motivating employees, has shown to be an important lever for organizational success (Chuang & Liao, 2010; Crook, Todd, Combs, Woehr, & Ketchen, 2011; Liao, Toya, Lepak, & Hong, 2009; Takeuchi, Lepak, Wang, & Takeuchi, 2007). Over the last years, employee performance management (PM) became increasingly important in this regard (Farndale, Hope-Hailey, & Kelliher, 2011; Gruman & Saks, 2011). Human capital can be defined as a unit-level resource, created from the emergence of employees’ knowledge, skills, and abilities (KSAs) (Ployhart, Van Iddekinge, & MacKenzie, 2011). PM activities are generally seen as an important vehicle to motivate employees, improve their KSAs, their performance, and hence organizational effectiveness (Armstrong & Baron, 1998; Den Hartog, Boselie, & Paauwe, 2004; Fletcher, 2001). These activities may include management by objectives, performance appraisal systems, reward strategies, training and development, career planning, etc. (I. Roberts, 2001)

The actual implementation of PM practices has been identified as a challenging endeavour (e.g. Armstrong & Baron, 2004; Dewettinck, 2008; Latham, Almost, Mann, & Moore, 2005; Latham & Locke, 2006). Employees may perceive PM practices significantly different than the way they are intended by the HR department (Biron, Farndale, & Paauwe, 2011; Purcell & Hutchinson, 2007). The reason for this gap in perception can be found with the various front-line managers (FLMs), who are often the primary responsible to implement PM and other HR practices (e.g. Gratton & Truss, 2003; Hall & Torrington, 1998; Purcell & Hutchinson, 2007). Because of their greater cognitive proximity, direct supervisors exert a much bigger impact on employees’ behavior and attitudes towards the organization than more distal factors, such as top management or HR management (Chen, Tsui, & Farh, 2002; Eisenberger, Stinglehamber, Vandenberghie, Sucharski, & Rhoades, 2002; Gilbert, De Winne, & Sels, 2011; Redman & Snape, 2005). The effectiveness of PM systems therefore depends to a great extent on the proper enactment of these systems by the front line manager (FLM) or direct supervisor.

Even though scholars agree that FLMs play a crucial mediating role in the causal chain between HR policies on a firm level and employee outcomes, still little is known about the underlying processes that form the basis for this phenomenon. Therefore, several authors stress the need for a more fine-grained and integrated understanding of HR enactment by line managers (e.g. Den Hartog, et al., 2004; Larsen & Brewster, 2003; Purcell & Hutchinson, 2007) and for further empirical validation using employee perceptions (Dewettinck & Remue, 2011; Paauwe & Boselie, 2006; Wright & Boswell, 2002).
To date, a few empirical studies have investigated the effects of PM-enactment on employee outcomes (e.g., Gilbert, et al., 2011), but the factors that cause FLMs to engage in PM practices remain largely uncharted.

The purpose of this study is to fill this gap by enhancing our knowledge on both the antecedents and consequences of line management PM enactment. Two general research questions drive the design of this study and are illustrated in the conceptual model in Figure 1.

1. What are the antecedents that cause FLMs to engage in PM activities? More specifically, to what extent do performance culture, perceived HR support and individual characteristics influence PM enactment by front line managers? How are these relationships mediated by FLMs’ attitude towards performance management? And what is the role of FLM’s span of control in this relationship?

2. What are the consequences of PM enactment by FLMs? More specifically, to what extent are employees' job satisfaction and engagement influenced by PM enactment?

The central variable in this model is PM enactment, referring to practices line managers use to motivate and steer employees and teams to improve performance, such as formal and informal performance feedback (Dewettinck, 2008). In this study, PM enactment is operationalized by three variables: the frequency by which FLMs hold formal PM conversations, the duration of these formal activities, and the frequency of informal PM conversations. These variables include, but are not limited to, the formal activity of performance appraisal (PA). In the past, PA was associated with a rather basic process involving a FLM completing an annual report on an employees’ performance, which was discussed with him or her during a formal appraisal talk. More recently however, PA is seen as a broader activity, seeking to assess, reward, develop and motivate employees (Fletcher, 2001). In addition to these formal characteristics of an organisation’s PM system, the three variables also encompass the way in which PM manifests itself in daily practice. Indeed, whereas formal PM enactment helps the employee to understand the process and the outcomes of PAs, it has been suggested that informal meetings help him/her to actually live up to the criteria of this system, as these interactions provide the opportunity to offer specific, behavioral and timely feedback (G. E. Roberts, 2003)
We examine the model in two different studies. Study 1 takes the perspective of line managers and focusses on the antecedent variables of PM-enactment (research question 1). We identified the performance culture within the company as a determining organizational variable for PM-enactment (Biron, et al., 2011). In addition, we will look into the quality and amount of PM-support by the HR department (Biron, et al., 2011; Gilbert, et al., 2011). The third antecedent focusses on line managers’ individual characteristics, more specifically their implicit person theory, regarding the malleability of personal attributes such as personality and ability (Dweck, 1986). We expect these three antecedents to impact FLM’s attitude towards PM practices, which in turn will affect PM-enactment. Study 2 examines the implementation and consequences of PM enactment through the eyes of employees (research question 2). We expect PM enactment, while controlling for FLM’s general concern about their team members’ well-being, to affect employees’ behavior and attitudes towards the organization (Gilbert, et al., 2011). We control for FLM’s employee concern because we also want to take the possibility of so-called ‘third factors’ into account in examining the effects of PM enactment (Paauwe, 2009; Wright, Gardner, Moynihan, & Allen, 2005). As the role of line managers consists of both a management component and a leadership component (Gilbert et al., 2011; Purcell and Hutchinson, 2007), it is likely that this leadership component serves as a substitute for PM enactment, thereby weakening or neutralizing the influence of PM enactment (Chuang, Jackson, & Jiang, 2013). We take general FLM’s employee concern as a proxy for this more general leadership component, enabling us to investigate the unique contribution of PM-enactment in explaining our outcome variables. In our study, employees’ attitudes are measured by satisfaction and engagement.

This paper contributes to the literature in an important way. We provide one of the first empirical attempts to gain a more fine-grained understanding of the link between antecedents of PM enactment and employee outcomes. Whereas a few scholars have investigated employee outcomes of HR enactment by line management, we are not aware of empirical studies that have integrated antecedents that affect this enactment. Furthermore, we elaborate the existing knowledge on employee outcomes of PM enactment by focussing on job satisfaction and employee engagement. This paper proceeds as follows. First we provide a theoretical foundation for our hypotheses on the antecedents and consequences of PM enactment by FLMs. Second, we report on the study’s methodology and findings. Finally, the paper concludes with a discussion and avenues for future research.
LITERATURE REVIEW AND HYPOTHESES

Study 1: Antecedents of PM Enactment

We do not gain a full picture on the causes and effects of HR systems without taking into account the context within which they are enacted (Den Hartog, et al., 2004; Guest, 2011; Keegan, Huemann, & Turner, 2012). (In)formal organisational practices are part of this context and can be an important vehicle by which organisations set expectations that guide members’ behaviours (Biron, et al., 2011). We draw from signalling theory (Murray, 1991; Spence, 1973) to propose that an organisation’s performance culture affects the degree to which line managers enact PM practices. This theory suggests that people (e.g. shareholders, employees, customers) seek tangible information in order to understand the organisation’s interests. This information is used to form inferences about what issues are important in the organisation, and may thus serve to guide or strengthen relevant behaviours or attitudes (Biron, et al., 2011; Murray, 1991; Srivastava & Lurie, 2001). Signalling theory has primarily been used to investigate signalling processes targeted at or initiated by external parties (e.g. customers, job applicants, competitors), but can also be applied to internal signalling processes (Biron, et al., 2011).

Bowen and Ostroff (2004), for example, pointed at the importance of communication by top management about HR practices concerning the effectiveness of HR implementation. Biron et al. (2011) proposed four organisational practices (i.e. involvement of senior management, clear communication of performance expectations, rater training, and strategic versus tactical goals of PM systems) that serve as signals which facilitate the effectiveness of the performance management system.

In addition to these formal practices, informal factors such as organizationally embedded attitudes and values (i.e. corporate climate: Moran & Volkwein, 1992), can also shape HRM practices (Bowen & Ostroff, 2004). Indeed, FLMs may well not enact the formally articulated HR policies of top management, but rather reflect the informal culture of the organisation. This informal culture sometimes may even override formal HR policies. Truss (2001), for instance, found that in Hewlett Packard, a strong internal network with influential people played a more crucial role in promotions than the formal policy on performance-based promotion. Hence, both formal HR policies and informal culture need to work together to produce desired results (Thite, 2004). We therefore propose that an organisation’s performance culture (i.e. having a result-oriented style, high performance expectations,
‘winning’ as an important organisational theme, etc.) has an important signalling function, indicating that engaging in performance management activities is expected from the line. Hence, we hypothesize:

Hypothesis 1a: Performance culture is positively related to FLM’s enactment of formal PM – frequency.

Hypothesis 1b: Performance culture is positively related to FLM’s enactment of formal PM – duration.

Hypothesis 1c: Performance culture is positively related to FLM’s enactment of informal PM – frequency.

Line managers are often identified as being essential to the delivery of HR services, acting as a crucial link between organisational HR policies and their influence on employee performance (Hutchinson & Purcell, 2010; Purcell & Hutchinson, 2007). However, problems often arise in FLM’s enactment of these HR policies. Unclear roles, policies or procedures, and insufficient competencies are often mentioned among these difficulties (e.g. McConville, 2006; Nehles, Van Riemsdijk, Kok, & Looise, 2006; Whittaker & Marchington, 2003). McGovern, Gratton, Hope-Hailey, Stiles, and Truss (1997) for instance, suggested that the low educational and technical base of line managers in Britain hinder the effective devolution of HRM to the line. A study by Renwick (2003b) concluded that line managers mostly do have the desire to do the HR work that has been devolved to them, and may have both the capacity and ability to do it well, but only if they are adequately trained and assisted by HR. In other words, the HR department can play a crucial role in overcoming much of the obstacles that line managers face in enacting PM practices. FLMs need advice and coaching on how to perform HR activities (Whittaker & Marchington, 2003). If HR specialists are unable or unwilling to provide clear and proactive support, FLMs will lack sufficient HR skills (Gennard & Kelly, 1997; McGovern, 1999). By providing sufficient support in the form of training and communication about procedures and policies, FLMs will be more able to (properly) enact their PM responsibilities.

In addition to offering actual support, the HR department also affects the degree to which FLMs enact HR practices by sending a ‘signal’ about the importance of these practices, through the provision of this support. Indeed, HRM practices are often viewed as communications from the employer to the employee (e.g. Bowen & Ostroff, 2004), meaning that HR support not only has a purely instrumental function, but also serves as an important signalling function to FLMs regarding PM enactment. In short, we propose that clear and proactive support by the HR department sends a signal that the organisation values PM practices, causes FLMs to be more confident in their PM competencies and less unclear about their role, which in turn will result in more PM enactment:
Hypothesis 2a: HR support is positively related to FLM’s enactment of formal PM – frequency.

Hypothesis 2b: HR support is positively related to FLM’s enactment of formal PM – duration.

Hypothesis 2c: HR support is positively related to FLM’s enactment of informal PM – frequency.

In addition to these contextual factors, line managers’ individual characteristics also have significant impact on the degree to which they enact PM activities. More specifically, we identified FLM’s implicit person theory as an important antecedent of PM enactment, as previous research has indicated that this fairly stable (Robins & Pals, 2002) personal characteristic plays an important role in the context of PM practices (Heslin & VandeWalle, 2011). Implicit theories are lay beliefs about the malleability of personal attributes (e.g., ability and personality) that affect behaviour (Dweck, 1986). People with a prototypical entity implicit theory assume that personal attributes are largely a fixed entity, whereas an incremental implicit theory assumes that personal attributes are relatively malleable. Managers holding an entity theory tend to inadequately recognize actual changes in employee performance. Moreover, it is argued that believing that people do not change could even prevent these individuals from investing effort in striving to help others improve their performance (Dweck, Chiu, & Hong, 1995; Heslin & VandeWalle, 2008). Helsin, Latham & Vandewalle (2006) for instance, found that using self-persuasion principles to induce incremental IPTs, increased managers’ willingness to coach poor performing employees, as well as the quantity and quality of their improvement suggestions. As PM activities are a mean to help employees develop and improve themselves, we hypothesize:

Hypothesis 3a: FLMs’ incremental IPT is positively related to their enactment of formal PM – frequency.

Hypothesis 3b: FLMs’ incremental IPT is positively related to their enactment of formal PM – duration.

Hypothesis 3c: FLMs’ incremental IPT is positively related to their enactment of informal PM – frequency.

However, despite a strong performance culture, sufficient HR support or holding an incremental implicit person theory, a manager will still be disinclined to enact PM practices if (s)he does not believe these activities to be useful (Harris, Doughty, & Kirk, 2002; McGovern, 1999). The degree to which FLMs enact PM practices does not only differ according to their level of opportunity or ability, but also according to their willingness and own sense of motivation (Harney & Jordan, 2008; Nehles, et al., 2006; Purcell & Hutchinson, 2007). It is therefore likely that the effect of the former three antecedents on PM enactment is mediated by FLM’s beliefs regarding the usefulness of these PM activities for attaining business objectives.
Indeed, an organisation’s culture affects the way in which individuals (sub)consciously think, make decisions and the way they perceive, feel and act (Hansen & Wernerfelt, 1989; Schein, 1990). This means that a performance culture not only signals that PM enactment is expected from the line, but can also affect the degree to which FLM’s perceive these PM practices as useful. In a similar vein, HR support in PM practices not only impacts FLM’s PM skills, but can also alter their beliefs regarding the importance and utility of these practices (Björkman, Ehrnrooth, Smale, & John, 2011). As FLMs are not always aware of the need of using HR practices to achieve their business goals (Harris, et al., 2002; Nehles, et al., 2006), HR support in the form of training or feedback can demonstrate the added value and effectiveness of these practices. Finally, as FLMs holding an entity theory assume that people do not change, it can be expected that these individuals will be less likely to believe PM practices are useful tools.

These beliefs will, in turn, affect the manager’s enactment of PM practices. This link can be explained by the Theory of Planned Behavior (Ajzen, 1991), which proposes behavioural intentions to be the main determinant of a person’s actions. These intentions are guided by subjective norms (i.e. social norms regarding the action and the individual’s compliance towards these norms), perceived behavioural control (i.e. the extent to which the individual believes (s)he can control the behaviour), and behavioural attitudes. The latter are the person’s subjective assessment of the probability that the behaviour will produce a given outcome. In the present study, this assessment is operationalized by the FLM’s attitude regarding the usefulness of PM practices.

In brief, FLM’s attitude towards PM seems to be a crucial and essential link trough which PM is enacted. It is thus likely that a FLM’s attitude regarding the usefulness of PM mediates the link between the above antecedents and PM enactment:

Hypothesis 4a: FLM’s PM attitude mediates the relationship between performance culture and (in)formal PM enactment.

Hypothesis 4b: FLM’s PM attitude mediates the relationship between HR support and (in)formal PM enactment.

Hypothesis 4c: FLM’s PM attitude mediates the relationship between implicit person theory and (in)formal PM enactment.
Despite having a positive attitude toward PM practices however, managers often have to give a low priority to their PM tasks in favour of other, more pressing, activities. Indeed, lack of time is a practical obstacle that is often associated with the devolvement of HR to the line (Larsen & Brewster, 2003; Schyns, Maslyn, & van Veldhoven, 2012). FLM’s with a large span of control for instance, will be more occupied with other aspects of day-to-day management. “Span of control” describes the number of employees who are formally and directly subordinated to a FLM and are reporting to him/her. The role of span of control has often been discussed in relation to the quality of leader-member relationships, concluding that leaders in large teams generally can spend less time with their followers (e.g. Cogliser & Schriesheim, 2000; Henderson, Liden, Glibkowski, & Chaudhry, 2009; Schyns, Maslyn, & Weibler, 2010). More specifically regarding FLM’s HRM responsibilities, Keegan et al. (2012: 3099) found that a line manager’s large span of control resulted in HR activities to be boiled down to “form-filling for quarterly performance reviews while qualitatively rich support for employee development and well-being suffers as a result”. In other words, a line manager’s span of control will not necessarily influence the frequency of formal PM conversations (s)he is obligated to do. It will however negatively affect the duration of these formal PM practices and the frequency with which informal PM conversations are held:

*Hypothesis 5a: Span of control moderates the relationship between FLM’s PM attitude and the enactment of formal PM – duration.*

*Hypothesis 5b: Span of control moderates the relationship between FLM’s PM attitude and the frequency of the enactment of informal PM – frequency.*

**Study 2: Consequences of PM Enactment**

The HR literature indicates that the move of HR managers towards a more strategic role and the devolvement of certain HR practices to the line can have a positive impact on employee outcomes and, in turn, firm performance (e.g. Andersen, Cooper, & Zhu, 2007; Gilbert, et al., 2011; Renwick, 2003a). However, a number of writers have criticized the link between HRM and corporate performance, arguing that HRM techniques might result in higher employee performance, but at the cost in terms of personal stress and quality of life (Guest, 2002). Therefore, our second study will focus on two attitudinal employee outcomes, representing both benefits for the firm and the employee. After all,
employee interests are considered to be an important end of HRM in itself (Guest, 2002; Paauwe, 2009; Peccei, 2004). A positive association of both outcomes with PM enactment, would support the ‘mutual gains’ perspective, in which both employers and employees benefit from PM systems (Kochan & Osterman, 1995). According to the so-called ‘conflicting outcomes’ perspective in contrast, PM enactment would have either no, or even a negative effect on employee interests.

On the one hand, outcomes beneficial for the employee are operationalized in this study by job satisfaction. This concept has been defined as an emotional state resulting from the evaluation or appraisal of one’s job experiences, or an affective attachment to the job (Locke, 1976). It represents a “worker’s overall affective evaluation of his or her job, and is widely used by social scientists and managers as an overall indicator of the quality of work experience, or of the extent to which an employee’s work meets his or her needs” (Appelbaum, Bailey, Berg, & Kalleberg, 2000).

On the other hand, employee outcomes beneficial for the organisation are operationalized by employee work engagement. This is defined as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli & Bakker, 2004; Schaufeli, Salanova, González-Romá, & Bakker, 2002). *Vigor* refers to high levels of energy and mental resilience while working, the willingness to invest effort in one’s work, and persistence also in the face of difficulties. *Dedication* refers to a sense of significance, enthusiasm, inspiration, pride, and challenge. The third dimension of work engagement is called *absorption* and is characterized by being fully concentrated and happily engrossed in one’s work, whereby time passes quickly and one has difficulties with detaching oneself from work.

Social exchange theory (Blau, 1967) has often been called upon to explain the link between HR practices on the one hand, and work engagement (e.g. Gruman & Saks, 2011; Mone & London, 2009; Richardson, 2010) and job satisfaction (Kooij, Jansen, Dikkers, & De Lange, 2010) on the other. According to this framework, employees interpret HRM activities as indicative of organisational support. Investments in HRM can give employees the feeling that their organisation cares for them and values their contributions, which causes them to reciprocate accordingly with positive work attitudes and behavior (Gould-Williams, 2007; Gould-Williams & Davies, 2005; Whitener, 2001). As mentioned in the introduction, it is likely that the management and leadership roles of FLMs act as substitutes for each other. As we want to investigate the unique contribution of PM enactment, we hypothesize:

*Hypothesis 6: FLM’s (in)formal PM enactment is positively related to employee’s work engagement, while controlling for FLM’s employee concern.*
Hypothesis 7: FLM’s (in)formal PM Enactment is positively related to employee’s job satisfaction, while controlling for FLM’s employee concern.

METHOD & RESULTS

Study 1

Sample and data collection

Data were collected in Belgium using a large-scale survey in a Dutch-spoken and a French-spoken job advertising newspaper. These newspapers publish articles on topical human resources issues and job advertisements and are very widely distributed because they are a supplement to several national newspapers and two weekly magazines. In addition, the newspapers are supported by an extensive website for jobseekers, employers and human resources professionals. Respondents could participate in the survey by completing an online version of the survey. Additionally, line managers received an email invitation to participate in this study. A total of 721 respondents filled out the questionnaire.

On average, the respondents are 41 years of age, ranging from 24 to 71 years old. Almost 80% of the respondents are male, the other 20% female. On average, the respondents have 6.5 years of experience within their current function, ranging from no experience to 40.5 years of experience. The average respondent works 7 years with the current employer, also ranging from 0 years to 40.5 years. On average, the line managers have almost 11 years of leadership experience.

Next, we are interested in the business profile of the respondents. As we look at the level the respondents work at, we see that the most represented level is that of General Management (34%). The education level of the respondents is high: the surveyed people all have finished at least secondary school; the biggest group (41%) holds a master degree. The majority of the respondents work in a private company (85%). Only 42% of these companies are quoted on the stock exchange. These companies mainly provide services (almost 58%). Most line managers are working in a company with more than 1000 employees (35%). As we look to the distribution of the industries, the majority of the respondents work in Metal Processing, Engineering & Electronics (14%), Distribution & Logistics (12%) and Banking (11%). The greater part of the companies has its head office in Belgium (51%) or
somewhere else in the European Union (32%). Both the socio-demographic and business-profile can be found in Table 1 below.

Insert Table 1 about here

Measures

The scales that were used to measure the constructs that are included in our model are presented below.

Performance culture. The used scale is based on one dimension of Cameron and Quinn’s (2006) Competing values model, indicating the presence of a performance culture within the organizations of the respondents. These items reflect the performance orientation within the daily operations of the organization. On a 5-point scale, the respondents were asked to which extent their organization is result-driven. Sample items are “The top of our organization is known for their no-nonsense and very result oriented style” and “Our organisation is very result driven. Employees are competitive and focussed on attaining results”. The reliability of this 4 item scale is .84.

Perceived HR support. On a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree), the respondents are asked whether they feel that the PM activities are supported by the Human Resources department. We used 11 items provided by Armstrong & Baron (2005). Sample items are “I have received an advanced training in PM skills” and “HR provides comprehensive resources to support me with PM practices”. Reliability for this scale in this study is .93.

Implicit Person Theory. We assessed FLM’s implicit person theory using the domain (e.g. morality, intelligence, sociability, etc.) general IPT scale adopted by Chiu, Hong and Dweck (1997). This scale consists of three items: “The kind of person someone is, is something very basic about them and it can't be changed very much”, ”People can do things differently, but the important parts of who they are can't really be changed” and “Everyone is a certain kind of person and there is not much that can be done to really change that.” Respondents indicated their extent of agreement with each item on a 5-point scale. Cronbach alpha reliability for this scale is .80.

PM attitude. This construct has been measures with a 4-item scale that has been developed for the purpose of this study. Sample items are ‘Performance reviews are a useful instrument to communicate to team members’ and ‘Even if it wouldn’t mandatory, I would organize performance review conversations with my team members’. Reliability for this scale is .87.
PM enactment. The items to assess PM-enactment have been developed by Dewettinck (2008) and Dewettinck and van Dijk (2013). The frequency of formal performance reviews was measured by the open-ended question ‘How often, on average, did you discuss the performance of your team members on an formal and individual basis? (e.g., appraisal/development/evaluation review)’. The duration of formal performance reviews was assessed by the open-ended question ‘What was the average duration of those reviews’? The frequency of informal performance reviews was measured by the question ‘How often, on average, did you discuss your team members’ performance in an informal manner (for example, after departmental meetings with your FLM, during a move, during an informal lunch or drink, when you dropped by at the office, …) on a nine-point Likert scale ranging from daily to once per year.

Span of control. The span of control, referring to the number of subordinates a FLM has, has been made more specifically tailored to the PM-context and has been measured by the single open ended question “For how many people are you responsible to have performance review conversations?”.

Analyses

To ensure that latent constructs are adequately measured, we assessed the measurement properties by examining the factor structure underlying the items and the correlations between the constructs. We also tested our measurement model through confirmatory factor analysis in AMOS (all variables and latent constructs included in the model and covariance relationships specified between the latent constructs). The hypotheses were simultaneously tested in a structural model, using maximum likelihood estimation in AMOS (Arbuckle & Wothke, 1999). Using Structural Equation Modeling (SEM) has several advantages. First, it provides a systematic basis for evaluating the ‘fit’ of the hypothesized model to data based on a χ2-statistic, incremental fit indices (e.g. nonnormed-fit-index, comparative fit index) and other indicators of absolute fit including Root Mean Square Error of Approximation (MacCallum & Austin, 2000). Second, it provides control over measurement error that can constitute over 50 percent of the observed variance and often introduces substantial bias in estimated effects and hypothesis testing (Ping, 2001).

To test the moderation hypothesis, we used a multi-group analysis using structural equation modelling. For the first group, we selected cases below the 40% percentile score on span of control. The second group consisted of cases with a score higher than the 60% percentile score. A different relationship between PM attitude and enactment between these two groups indicates a moderation effect. Although researchers have warned to be careful to use split group approaches to assess moderation effects between continuous variables (Frazier, Tix, & Barron, 2004), others have suggested
that this technique can be warranted in particular cases (e.g. DeCoster, Iselin, & Gallucci, 2009; Preacher, Rucker, MacCallum, & Nicewander, 2005). More specifically, we used this method in order to ensure that the particular attributes (i.e. low and high span of control) crucial to our hypothesis were adequately represented. A frequency analysis showed a non-normal distribution of the variable, with a relatively low concentration of respondents representing a high span of control (> 15). Authors have suggested that dichotomization is appropriate in case of non-normal data (Preacher, et al., 2005).

Results

Table 2 presents the basic correlation table, including average scores, standard deviations, and reliabilities where applicable.

In terms of overall fit, table 3 reveals the following fit statistics: $\chi^2 = 966.15$, df = 282, $p < .001$, GFI = .91, NFI = .90, NNFI = .91, CFI = .92, RMR = .03, RMSEA = .05 (90% CI = .05 to .06). The relative fit indicators exceed .90 and the absolute fit indicators suggest that the residuals are small and tightly distributed. Consistent with this, the parsimony fit indicator, NNFI, exceeds .91, indicating that the model has adequate over-identifying restrictions for parsimony. This analysis suggests a significant difference between the theoretical and empirical model. However, considering sample size and the abovementioned statistics, we conclude that our model provides an adequate fit to the data.

The path coefficients enable us to draw some conclusions concerning the hypothesized relationships. Our first three hypotheses theorised a positive relationship between our antecedent variables and PM enactment. However, as none of the regression coefficients were significant, Hypothesis 1a, 1b, 1c, Hypothesis 2a, 2b, 2c, and Hypothesis 3a, 3b, 3c were not supported. We did however find significant relationships between HR support and Implicit person theory on the one hand, and PM attitude on the other. Furthermore, PM attitude showed to be positively related to all aspects of PM enactment (i.e. frequency formal conversations, duration of formal conversations and frequency of informal conversations). Overall, the explained variances are however quite small (ranging from 2% for frequency of formal conversations to 5% for PM attitude). These results indicate an indirect relationship between perceived HR support and Implicit person theory through PM attitude, thus providing partial support for Hypothesis 4b and 4c. Hypothesis 4a was not supported. Perceived HR support is, through
the relationship with attitude, positively related to PM enactment. Notable is the negative relationship between Implicit Person Theory and PM attitude, indicating that frontline managers with a stronger entity theory tend to have a less positive attitude towards performance management activities, which in turn negatively related to their PM enactment.

We also tested a separate structural model in which we only modelled the relationship between our latent PM attitude construct and the three PM enactment outcomes when span of control was respectively high (above 60 percentile score) and low (below 40 percentile score). The average span of control was 2.71 in the first group and 22.40 in the second group. The fit indices for this multi-group structural equation model ($\chi^2 = 52.7$, df = 24, $p < .001$, GFI = .98, NFI = .96, NNFI = .96, CFI = .98, RMR = .03, RMSEA = .04 (90% CI = .03 to .06) indicate a good fit to the data. When span of control was low, the standardized regression weights were respectively .17 for frequency of formal conversation, .16 for duration of formal conversations and .22 for frequency of informal conversation. When span of control was high, the standardized regression weights were respectively .07 for frequency of formal conversations, .05 for duration of formal conversations and .07 for frequency of informal conversations. These findings provide support for Hypothesis 5a and Hypothesis 5b. Contrary to our expectations, we even found that when span of control is high, a positive attitude to PM is not correlated with higher PM enactment reflected in the frequency of formal conversations. This indicates, as illustrated in Figure 2, an overall inhibiting effect of span of control on the relationship between PM attitude and PM enactment.

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Insert Figure 2 About Here

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Study 2

**Sample and data collection**

For this second study, we selected one organisation to investigate the relationships between PM enactment and employee outcomes. The company is active within the health insurance industry. It is a member based organisation, in which members have to send their medical bills to the organisation that in turn takes care of the reimbursement. The industry of medical insurance used to be a stable market with little competitive pressure, as membership was passed through from parents to children. However, recently, new players entered this market leading to a relatively more volatile industry situation.
Because of these changed market conditions, competitive pressure increased. As a result, a more performance oriented culture seemed necessary and a performance management system was installed. Although the focus is still heavily on how the job is executed, first attempts were made to install a performance review cycle in which individual employee objectives need to be agreed upon and evaluated by the FLM, although without being linked to salary adjustments or bonus systems. The performance orientation of the company is still quite small. Using the data from the frontline managers ($N = 731$) from this company in study 1, the company only scored at the 5th percentile in terms of performance oriented culture.

Employees of one regional headquarter of this organisation received an invitation to collaborate in this study by filling out a seven-page online survey. 425 of the 745 employees participated in this study, resulting in a response rate of about 61 percent. 70 percent of the sample is female. The average age of the respondents is 40 years old. They have on average 14 years of seniority. The big majority has a professional bachelor degree. Only 16% have a master degree.

**Measures**

The scales that were used to measure the constructs that are included in our model are presented below.

**PM enactment.** For PM-enactment, we used the same scales as those used in Study 1, but we adapted them to suit the employee perspective. The frequency of formal performance reviews was measured by the open-ended question ‘During the last year, how often did your FLM discuss your performance with you on a formal and individual basis? (appraisal/development/evaluation review)’. The duration of formal performance reviews was assessed by the open-ended question ‘What was the average duration of those reviews’? The frequency of informal performance reviews was measured by the question ‘How often did your FLM discuss your performance with you in an informal manner (for example, after departmental meetings with your FLM, during a move, during an informal lunch or drink, your FLM who unplanned drops by at your desk, …)’ on a nine-point Likert scale ranging from daily to once per year.

**FLM’s employee concern.** General concern for employee well-being has been measured by an 8 item scale, developed by Arnold, Arad, Rhoades and Drasgow (2000) as one dimensions of their empowering leadership scale. Reliability for this scale is .92.
Job satisfaction. Job satisfaction was measured by a 5-item scale based on the Job Description Index (Johnson, Smith, & Tucker, 1982), tapping into employees’ satisfaction with several job aspects such as work content, supervision, coworkers, pay and promotion. Reliability of this scale is .68.

Engagement. Employee engagement was measured by the short, nine item version of the Utrecht Work Engagement Scale (UWES: Schaufeli, Bakker, & Salanova, 2006). Reliability in this study was .93.

Analyses

In study 2, we used the same approach to assess the measurement properties and discriminant validity of our variables as in study 1. Because of the high correlations between our latent constructs, we compared the extracted and shared variance between our variables to assess discriminant validity. To make our structural model more parsimonious, we represented the outcome variables by two (for job satisfaction) or three (for engagement) standardized, randomly composed, composite indicators (see e.g. Little, Cunningham, Shahar, & Widaman, 2002; Sass & Smith, 2006).

Results

Table 4 presents the basic correlation table, including average scores, standard deviations, and reliabilities where applicable.

Because of the high correlations between the latent constructs in our model, we compared the shared and extracted variances for each of our latent constructs to assess the discriminant validity. The average shared variance between concern, job satisfaction and engagement is .27, while the extracted variances are .75 for concern, .79 for engagement and .50 for job satisfaction. The relatively high extracted variances for concern and engagement can be explained by the unidimensional nature of these constructs, while the relatively low extracted variance for job satisfaction can be explained by its multi-faceted nature. But even for job satisfaction, the extracted variance is about twice as high as the shared variance with engagement and concern, indicating that there is sufficient evidence of discriminant validity.
In terms of overall fit, table 5 reveals the following fit statistics: $\chi^2 = 228.25$, df = 82, $p < .001$, GFI =.93, NFI =.93, NNFI=.94, CFI =.95, RMR=.03, RMSEA=.07 (90% CI = .06 to .08). The relative fit indicators exceed .92 and the absolute fit indicators suggest that the residuals are small and tightly distributed. Consistent with this, the parsimony fit indicator, NNFI, exceeds .94, indicating that the model has adequate over-identifying restrictions for parsimony. Again, this analysis suggests a significant difference between the theoretical and empirical model. Considering sample size and the abovementioned statistics however, we can conclude that our model provides an adequate fit to the data.

The path coefficients enable us to draw some conclusions concerning the hypothesized relationships. Although we found a significant relationship between frequency of formal conversations and job satisfaction, the overall results suggest that informal PM-enactment shows the be more important in explaining employee outcomes. Both for job satisfaction and engagement we found a positive relationship. Thus, Hypotheses 6 and Hypothesis 7 are only partially supported. Overall, the relationships are however not very strong. Furthermore, FLM’s general concern for employee well-being showed to be much stronger related to both employee job satisfaction and engagement than our PM-enactment variables.

**DISCUSSION**

Although a large body of research demonstrates a positive relationship between HRM and firm performance (Boselie, Dietz, & Boon, 2006; Combs, Liu, Hall, & Ketchen, 2006), evidence is still needed to explain why exactly this association exists (Guest, 2011). Researchers have therefore called to open the “black box” (Purcell & Kinnie, 2007) to investigate intervening variables and constructs that help to explain this association. One research avenue in this regard has been to focus on employee skills, attitudes or behaviours as mediating variables between the two end-points of the HRM – performance association (e.g. Macky & Boxall, 2007; Searle & Dietz, 2012; Van De Voorde, Paauwe, & Van Veldhoven, 2012). Furthermore, the gap between ‘intended’ and ‘actual’ HR practices (Wright & Nishii, 2006), has caused researchers to consider line managers to be central to the delivery of these practices (Purcell &
This study adds to these research streams by investigating the effects of FLM’s enactment of PM practices on employee engagement and satisfaction.

However, while strategic HRM scholars have extensively emphasized the critical role of FLMs in the effectiveness of HR practices in the past years, the determinants of their enactment of these practices have surprisingly remained uncharted. An important contribution of this paper therefore, is that it provides one of the first attempts to investigate factors influencing the extent to which FLMs enact PM practices. This has enabled us to draw a more complete and fine-grained picture of the actual implementation of PM practices. Below, the major conclusions and implications drawn from this study are discussed.

First, neither the organisational performance culture, perceived HR support, or FLM’s implicit person theory had a significant direct relationship with PM enactment. However, we found an indirect relationship between perceived HR support and FLM’s implicit person theory on the one hand, and PM enactment on the other, through FLM’s attitude towards PM practices. This finding suggests that FLM’s beliefs regarding the usefulness of PM activities are an important determinant of a successful implementation of PM policies. It is therefore important for organisations to emphasize the added value of PM practices if they want to devolve these practices to their FLMs. Our findings suggest that FLM’s implicit person theory is a strong indicator of these beliefs, and could therefore be a useful screening factor for allocating PM responsibilities to line managers.

Furthermore, these findings give some direction in the debate on the role for the HR department when HR work is increasingly decentralized and devolved to the line (Whittaker & Marchington, 2003). Some authors state that this evolution causes the HR department to lose its reason for existence (Cunningham & Hyman, 1999; Storey, 1992). Others see opportunities for HR professionals to redefine their roles and even gain influence in the organisation (Gennard & Kelly, 1997; Kulik & Perry, 2008). In line with the findings of Renwick (2003b), our findings indicate that the transfer of HR tasks to the line does not make the role of the HR department redundant. To the contrary, as HR support showed to be a strong indicator of FLMs’ positive attitude towards PM practices (and, in turn, PM enactment), greater involvement of the HR department seems to be needed, not less.

A second notable finding is that FLM’s span of control inhibits the positive effects of FLMs’ beliefs regarding the usefulness of PM practices on PM enactment. Our findings indicate that even when FLM’s have a positive attitude towards PM, it will not reflect in more PM enactment when span of
control is high. Although our study gives no indication on the turning point about when the inhibiting role starts emerging, our findings at least show that caution is needed when organisations remove hierarchical layers and simultaneously devolve PM practices to the line.

Third, PM enactment was positively related to employee engagement and job satisfaction, independent from FLM’s general concern for employee wellbeing. These findings are consistent with the literature, indicating that HR practices, as perceived by employees, have positive effects on employee outcomes. Although the unique contribution of PM enactment on top of FLMs’ employee concern is significant, the variance of outcome variables explained by PM enactment is relatively small. On the one hand, these results suggest a ‘substitution effect’, in which greater employee concern reduces the marginal profit of PM enactment (Chuang, et al., 2013). In other words, the enactment of PM practices is more beneficial for employees whose FLM displays less employee concern. On the other hand, we have to take into account the context in which our data was collected, as PM was introduced only recently within the organisation. As indicated by the low percentile score referred to in the introduction, the performance orientation within this organisation is not strongly developed yet. At the time of data collection, the organisation had just started with introducing a performance management cycle. We can assume that both employees and FLM’s still had to get comfortable with this system and the role they had to fulfil within this new approach.

PM enactment also shows to explain to a similar degree the variance of engagement and job satisfaction when controlled for the impact of general FLM concern for individual employees. Although we have to be careful with drawing causal conclusions from this cross-sectional study, these findings also provide support for the mutual gains perspective on HRM (Appelbaum, et al., 2000), as PM enactment by FLMs was associated with attitudinal outcomes that benefit both organisations (e.g. engagement) and employees (e.g. satisfaction).

As all studies, ours also has several limitations. First, although we build on theoretical insights that suggest causal relationships, our design does not allow to empirically test such relationships because of its cross-sectional nature. Especially in study 2, reverse or even reciprocal causality is probable: FLMs whose employees are more engaged, may find it easier to conduct more appraisal talks with those individuals, and vice versa. Therefore, future studies could use longitudinal or field experimental designs to provide a more rigorous test of the proposed causal relationships.
Secondly, although our two studies provide a complementary view on PM enactment from the FLM and employee perspective, both studies are still based on single-source data, increasing the risk that the relationships we found are inflated because of common-method variance. A useful next step would therefore be to collect matched data from both FLMs and employees.

Third, estimates in study 2 are significant, but relatively small. This is probably due to the fact that our data was collected in one single organisation in which PM is in an early stage of development. Although one could argue that this made the test of our hypotheses even more stringent, further research into organisations with a stronger performance orientation is warranted.

Fourth, the generalizability is of concern since our results are based on cross-industry data but from one country in study 1 and from data collected in a single organisation for study 2. As cultural elements might have an impact on the relationship between organisational characteristics and FLMs attitude and behaviour, further studies in a more diverse array of countries and cultures would be useful when considering the drivers of PM enactment. When considering the employee outcomes of employee enactment, data from several organisational contexts, industries and even cultures seems needed before more generalizable conclusions could be drawn.

Finally, we used a split-group approach in investigating the moderating effect of span of control. Although we believe this method was warranted in this particular case because of the limited sample size representing a high span of control, this technique may overestimate the magnitude of the relationship (Preacher, et al., 2005). Future research should therefore include a sample representing the full range of span of control, allowing to use more sophisticated techniques, such as moderated regression.

Further research for sure is needed because, although the actual implementation of PM practices has been identified as an important, yet challenging endeavour and the involvement of FLMs has been identified as a crucial element, still little is known about the drivers of PM enactment by line management. Our study indicates the relevance of investigating the organisational culture, support provided by HR and FLM personal characteristics to explain PM enactment. These factors show to be positively related to outcomes that are beneficial for both the individual employee and the organisation. Our study also suggests the importance of span of control to make performance management effective. We hope that our study will help practitioners and stimulate fellow academics to invest in gaining further insights into this intriguing and important research field.
REFERENCES


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**ACKNOWLEDGEMENTS**

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<table>
<thead>
<tr>
<th>Study 1: Respondents socio-demographic and business-profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Socio-demographic profile</td>
</tr>
<tr>
<td>Age (years)</td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Experience current function (months)</td>
</tr>
<tr>
<td>Experience current employer</td>
</tr>
<tr>
<td>Experience in leadership role</td>
</tr>
<tr>
<td>Business profile</td>
</tr>
<tr>
<td>Business domain</td>
</tr>
<tr>
<td>General Management</td>
</tr>
<tr>
<td>Sales</td>
</tr>
<tr>
<td>IT</td>
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<tr>
<td>Education level (University)</td>
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<td>Listed company</td>
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<td>Main activity</td>
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<tr>
<td>Services</td>
</tr>
<tr>
<td>Both</td>
</tr>
<tr>
<td>Size of company (&gt;1000)</td>
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<tr>
<td>Sector</td>
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<tr>
<td>Metal, Engineering &amp; Electronics</td>
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<tr>
<td>Distribution &amp; Logistics</td>
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<tr>
<td>Banking</td>
</tr>
<tr>
<td>Location of HQ</td>
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<tr>
<td>Belgium</td>
</tr>
<tr>
<td>EU</td>
</tr>
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TABLE 2

Study 1: Means, standard deviations and correlations among variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>1. Performance culture</td>
<td>3.35</td>
<td>.93</td>
<td>.84&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. HR support</td>
<td>2.90</td>
<td>.83</td>
<td>.26&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Implicit Person Theory</td>
<td>3.16</td>
<td>.82</td>
<td>.02</td>
<td>-.12</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. PM attitude</td>
<td>4.35</td>
<td>.70</td>
<td>.12</td>
<td>.27</td>
<td>-.13</td>
<td>.87</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5. Formal PM - Frequency</td>
<td>6.60</td>
<td>5.05</td>
<td>.17</td>
<td>.11</td>
<td>-.04</td>
<td>.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Formal PM - Duration</td>
<td>53.25</td>
<td>32.05</td>
<td>.10</td>
<td>.05</td>
<td>.02</td>
<td>.14</td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Informal PM - Frequency</td>
<td>4.78</td>
<td>1.81</td>
<td>.12</td>
<td>.03</td>
<td>-.04</td>
<td>.18</td>
<td>.01</td>
<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Span of control</td>
<td>12</td>
<td>20.10</td>
<td>-.02</td>
<td>.12</td>
<td>-.15</td>
<td>.07</td>
<td>-.05</td>
<td>-.02</td>
<td>-.07</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> = N = 731. Construct mean and standard deviation based on average mean and standard deviation of observed items’ raw score per first order construct

<sup>b</sup> = Entries on the diagonal are Cronbach’s alphas

<sup>c</sup> = Correlations > .07, p < .05; correlations > .09, p < .01; correlations > .12, p < .001
### TABLE 3

**Study 1: Estimated parameters and fit statistics for the structural model**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>PM Attitude</th>
<th>Formal PM - Frequency</th>
<th>Formal PM - Duration</th>
<th>Informal PM - Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B (S.E.)</td>
<td>t-value</td>
<td>B (S.E.)</td>
<td>t-value</td>
</tr>
<tr>
<td>Performance Culture</td>
<td>.07 (.05)</td>
<td>1.46</td>
<td>.10 (.07)</td>
<td>1.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.13 (.07)</td>
<td>1.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.13 (.07)</td>
<td>1.94</td>
</tr>
<tr>
<td>Perceived HR Support</td>
<td>.17 (.04)</td>
<td>3.89***</td>
<td>-.02 (.07)</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.05 (.07)</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.03 (.06)</td>
<td>0.50</td>
</tr>
<tr>
<td>Implicit Person Theory</td>
<td>-.09 (.04)</td>
<td>2.61**</td>
<td>.03 (.05)</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.05 (.05)</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-.03 (.05)</td>
<td>0.65</td>
</tr>
<tr>
<td>PM Attitude</td>
<td>---</td>
<td>.20 (.06)</td>
<td>3.17**</td>
<td>.21 (.06)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.33**</td>
<td>.26 (.06)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.08***</td>
</tr>
</tbody>
</table>

\[ R^2 = .05 \] \[ R^2 = .02 \] \[ R^2 = .03 \] \[ R^2 = .05 \]

*** = \( p \leq .001 \) (critical t-value = 3.36)

** = \( p \leq .01 \) (critical t-value = 2.61)

* = \( p \leq .05 \) (critical t-value = 1.98)

--- = relationship not hypothesized/specified

Fit: \( \chi^2 = 966.15 \), df = 282 (\( p < 0.001 \)), CFI = 0.92, NFI = 0.90, CFI = 0.92, RMSEA = 0.058 (90% CI = .054 to .062).
<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<tbody>
<tr>
<td>1. Formal PM - Frequency</td>
<td>3.97</td>
<td>.78</td>
<td></td>
<td></td>
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<tr>
<td>2. Formal PM - Duration</td>
<td>70.52</td>
<td>48.05</td>
<td>-.12&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Informal PM - Frequency</td>
<td>2.03</td>
<td>1.03</td>
<td>.08</td>
<td>.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Job satisfaction</td>
<td>3.69</td>
<td>.46</td>
<td>.21</td>
<td>-.03</td>
<td>.23</td>
<td>.68&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Engagement</td>
<td>5.03</td>
<td>1.07</td>
<td>.14</td>
<td>.09</td>
<td>.23</td>
<td>.53</td>
<td>.93</td>
<td></td>
</tr>
<tr>
<td>6. FLM’ employee concern</td>
<td>3.66</td>
<td>.78</td>
<td>.12</td>
<td>.00</td>
<td>.33</td>
<td>.47</td>
<td>.34</td>
<td>.92</td>
</tr>
</tbody>
</table>

<sup>a</sup> = N = 425. Construct mean and standard deviation based on average mean and standard deviation of observed items’ raw score per first order construct

<sup>b</sup> = Entries on the diagonal are Cronbach’s alphas

<sup>c</sup> = Correlations > .10, p < .05; correlations > .12, p < .01; correlations > .16, p < .001
### TABLE 5

**Study 2: Estimated parameters and fit for the structural model**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Job satisfaction</td>
<td>Engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B (S.E.)</td>
<td>t-value</td>
<td>B (S.E.)</td>
</tr>
<tr>
<td>Formal PM - Frequency</td>
<td>.08* (.03)</td>
<td>2.32*</td>
<td>.04 (.04)</td>
</tr>
<tr>
<td>Formal PM - Duration</td>
<td>-.04 (.03)</td>
<td>-1.07</td>
<td>.06 (.04)</td>
</tr>
<tr>
<td>Informal PM - Frequency</td>
<td>.09 (.03)</td>
<td>2.77**</td>
<td>.10 (.04)</td>
</tr>
<tr>
<td>FLMs employee concern</td>
<td>.52 (.05)</td>
<td>11.63***</td>
<td>.29 (.05)</td>
</tr>
</tbody>
</table>

\[ R^2 = .42 \quad R^2 = .11 \]

*** = \( p \leq .001 \) (critical t-value = 3.60)

** = \( p \leq .01 \) (critical t-value = 2.73)

* = \( p \leq .05 \) (critical t-value = 2.03)

Fit: \( \chi^2 = 140.915, \) df = 35 (\( p < 0.001 \)), CFI = 0.96, NFI = 0.95, RMSEA = 0.088 (90 \% CI = .073 to 1.104).
FIGURE 2

Study 1: Span of control moderating the relationship between PM attitude and PM enactment