Using Performance Management to Manage Teams:
A Useful Partner or an Ambush

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ABSTRACT

This study aims to provide new insights into how performance management can contribute to team-level outcomes by exploring the importance of performance management implementation. Building on the system strength theory, the study examines how a strong implementation of performance management, i.e. a highly distinctive, consistent and consensus-based performance management system, is able to generate shared perceptions about performance management strength that, ultimately, fosters backing-up behaviour. In addition, the study explores if the transformational leadership style precedes a strong implementation of performance management. Results from our multi-source data of 115 police teams, confirms the theoretical model. Transformational leaders are more likely to implement a strong performance management system that fosters backing-up behaviour, through shared perceptions of performance management strength. As such, the results provide a better understanding of the linkages that connect performance management to higher level outcomes.

INTRODUCTION

The study examines the relevance of a strong implementation of performance management for teams. The study focuses on how a strong implementation of performance management affects backing-up behaviour in teams, through the team's shared perceptions of performance management strength. In addition, the study examines if the specific leadership style of transformational leadership contributes to a strong implementation of performance management.

Organizations frequently use performance management as a tool to manage their teams in the desired direction (Aguinis, Gottfredson, & Joo, 2013; Van Thielen, Decramer, Vanderstraeten, & Audenaert, 2018). By setting- up goals, monitoring and evaluating team members on aspects that are linked to the overall team and organizational objectives, the Human Resource Management (HRM) system of performance management is able to simultaneously foster the individual development and the individual contribution to the team (Aguinis, 2009). Therefore, performance management has become a frequently used tool to manage teams in both public as well as private organizations (Bauwens, Audenaert, Huisman, & Decramer, 2017; Cascio, 2006; Decramer, Smolders, Vanderstraeten, Christiaens, & Desmidt, 2012).

However, over the years, research findings tend to proclaim a more nuanced understanding of performance management's effectiveness. Some scholars indeed found positive effects, such as higher team performance (Aguinis et al., 2013) or organizational performance (Biron, Farndale, & Paauwe, 2011). Nevertheless, these studies are counterbalanced by research that indicates that performance management is not always able to generate beneficial effects. Several studies illuminate perverse side-effects, such as unethical behaviour (Ordóñez & Schweitzer, 2009) or frustration towards performance management (Coutts & Schneider, 2004).

Because of the ambiguous results generated by performance management, scholars started to focus on the implementation of performance management to understand *when* performance management is able to foster desirable outcomes. More specifically, the system strength theory of Bowen and Ostroff (2004) identified that not only the content of HRM systems is important, but also the process of implementing the system. They highlighted several meta-features of HRM systems, such as distinctiveness, consistency and consensus (Bowen & Ostroff, 2004), that are considered to determine a strong implementation of HRM system. Their theory (Bowen & Ostroff, 2004), has led to an abandon of new research focusing on the beneficial effects of HRM systems' implementation confirming that the implementation of HRM systems, and performance management more specific, determines how effective they are, both in terms of performance (Audenaert, Decramer, George, & Van Waeyenberg, 2016) and well-being (Decramer et al., 2015).

Nevertheless, these studies revealed effects on the individual level rather than on the higher organizational levels which were targeted by Bowen and Ostroff (2004). Despite the fact that the purpose of Bowen and Ostroff (2004) was to develop a theoretical framework that illuminates linkages between HRM practices, perceptions and higher-level performance, current research mostly recalled on their framework to connect performance management implementation to individual outcomes (Audenaert et al., 2016; Bauwens et al., 2017; Van Waeyenberg, Decramer, Desmidt, & Audenaert, 2016). As such, the effects of performance management on team-level outcomes has more often been assumed (Aguinis, 2009; Aguinis et al., 2013) than empirically proven. Reflections on higher levels are elaborated with aggregation measures (Denisi & Smith, 2014), but the differences in types and degree of aggregation depends on the work environment. For complex collaborations, simple aggregation is not sufficient to grasp the higher level effects generated by HRM systems (Bowen & Ostroff, 2004; Denisi & Smith, 2014; Nishii & Wright, 2008). High levels of collaborations and

interdependencies change organizational phenomena (Chen, Kanfer, DeShon, Mathieu, & Kozlowski, 2009). In addition, HRM systems are implemented more similar within teams that between teams (Van Thielen et al., 2018; Vermeeren, 2014), because the supervisor of each team, i.e. the team leader, is often responsible for the translation and implementation of performance management in the team (Bowen & Ostroff, 2004). Such differences in implementation can significantly change how effective performance management is in teams (Aguinis & Pierce, 2008), but are not considered by researchers yet.

This study addresses this lack of knowledge by explicitly considering an important team process such as backing-up behaviour (N. Podsakoff, Podsakoff, Mackenzie, Mayens, & Spoelma, 2014; Porter, 2005) and how it is affected by a strong implementation of performance management. We respect the levels of impact considered by Bowen and Ostroff (2004) and explicitly examine how the implementation of performance management by the team leader is able to generate higher levels of backing-up behaviour in his/her team. We also try to explain this relationship by examining the explanatory value of shared perceptions about performance management system strength of the team members between the implementation of a strong system and backing-up behaviour. As such, we also gain knowledge on how the shared perceptions on performance management strength are important to explain why a strong implementation of performance management fosters desirable team outcomes.

Even more, the contribution of this study does not stop by examining the beneficial effects of a strong performance management system. We also wonder what causes such differences in performance management's implementation. Team leaders can serve as interpretive filters of HRM practices (Nishii & Wright, 2008; Paauwe, 2009), and when they are implementing practices, they can introduce a common interpretation among team members (Bowen & Ostroff, 2004). Scholars already studied why there is a variability in how HRM gets implemented (Becker & Gerhart, 2014) and revealed that aspects such as suitability for the

work setting, personal preferences or even political ends of team leaders affect the implementation of HRM (Wright, Boxall, & Purcell, 2003). More recently, scholars linked the duty of implementing HRM practices to leadership behavior (Purcell et al., 2009) and suggested that line managers favor HRM practices that align to their own leadership style (Bass, 1990; Guest, 1999; Zhu, Chew, & Spangler, 2005). As it is important to determine the relative impact of and interrelationships between HRM system strength and other antecedents of situational strength (Bowen & Ostroff, 2004), we explicitly link the transformational leadership style to how performance management gets implemented. By increasing our understanding of what determines a strong implementation of performance management, the study also contributes to the call for more attention to the antecedents of a strong HRM system (Ostroff & Bowen, 2016).

THEORY

Backing-up behaviour in teams

Backing-up behaviour is considered to be a crucial aspect of teamwork (Porter, 2005). Backing-up behaviour is defined as the discretionary behaviour of providing resources and/or task-related efforts to another team member when it becomes clear that they are not able to attain their predefined goals by themselves (Porter, 2005). Marks et al. (2001) describes backing-up behaviour in teams as an action process on the team level, linked to the work motivation literature. More specifically, if teams demonstrate backing-up behaviour, they are undertaking action during task engagement that reflects their motivation to attain team objectives (Chen & Kanfer, 2006; Marks, Mathieu, & Zaccaro, 2001; J. Mathieu, Maynard, Rapp, & Gilson, 2008). Such behaviour is considered to be strongly related to team performance as team members with high levels of backing-up behaviour are aware of the overall team objectives and are willing to help each other to attain them (N. Podsakoff et al., 2014; Porter, 2005).

Backing-up behaviour has been associated to outcomes such as team performance (Whitman, Van Rooy, & Chockalingam, 2010) and innovative behaviour (Xerri & Brunetto,

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2013). Therefore, scholarly attention was paid to how backing-up behaviour could be stimulated. These studies found that backing-up behaviour is fostered by leadership, procedural justice climates (Ehrhart, 2004) and goal-setting (Porter, 2005). However, if performance management, as an often used HRM system to manage the behaviour of teams, is able to increase backing-up behaviour is not yet determined.

Performance management

Performance management is the strategic and ongoing human resource management (HRM) system that enables sustainable organizational success (Bauwens et al., 2017; Fletcher & Williams, 2015). Performance management is more than merely the once-in-a-year practice of appraising employees (Aguinis & Pierce, 2008). Performance management starts with the determination of objectives, values and behaviors in mutual agreement between the employee and leader and in accordance with the strategy of the organization (Van Thielen et al., 2018). These aspects are monitored daily and eventually evaluated and discussed, leading to new goals in the final evaluation stage of the performance management process (Aguinis & Pierce, 2008).

As performance management is an often used practice in private as well as public organizations (Biron et al., 2011), scholars demonstrated a lot of interest in this topic as well. The first studies considered the presence of the performance management system and how it influences desirable outcomes (Biron et al., 2011; Cascio, 2006). Later, research started to focus on the different practices (Decramer et al., 2015) and salient process features of performance management, such as the consistency of performance management (Audenaert et al., 2016), performance management fairness (Bauwens et al., 2017) and the vertical alignment of performance management (Decramer, Smolders, & Vanderstraeten, 2013). These salient features of performance management demonstrate positive effects for employees' performance and well-being (Audenaert et al., 2016; Bauwens et al., 2017).

When implemented in teams, performance management follows the same principles, but apart from targeting the individual performance, it also targets the individual contribution to the team (Aguinis et al., 2013). As such, scholars started to consider how performance management enhances the capabilities of teams as well (Aguinis et al., 2013; Aguinis & Pierce, 2008). Several multilevel models were developed to explore the relationship between the implementation of HRM systems and desired higher level outcomes (Bowen & Ostroff, 2004; Ployhart & Moliterno, 2011). For instance, the multi-level strategic HRM linkages developed by Nishii and Wright (2007). They focus on the variation in implementation to explain the relation between the distal outcomes of HRM practices and performance. Nishii and Wright (2007) make a difference between the intended HRM practices, the actual implemented HRM practices, the perceptions of the HRM practices and the reaction of employees to these HRM practices that lead to performance.

The theory of HRM system strength developed by Bowen and Ostroff (2004) had the same line of reasoning, but was even more progressive as the theory not only reflects on the importance of the implementation of HRM systems, but was even more progressive as they indicated that a strong implementation of an HRM system is more likely to generate the desired behaviour and attitudes in the organization. When performance management is strongly implemented, the system is able to send clear signals (Mischel, 1977) that allow the team members to understand the desired and appropriate responses and form a collective sense of what is expected. In such strong situation it is expected that team members will demonstrate the desired behaviour, such as backing-up behaviour.

Bowen and Ostroff (2004) also reflect on how an HRM system can be strongly implemented. They argue that the presence of certain meta-features of HRM-systems enable to create a strong situation in organizational units. Situations in organizations can be strong as they induce conformity or may be weak when they are interpreted as ambiguous (Bowen &

Ostroff, 2004). Only when HRM systems are able to establish a strong situation, they positively affect a desired organizational climate, generating positive behaviour and attitudes (Bowen & Ostroff, 2004). Building on the attribution theory (Kelley, 1976), Bowen and Ostroff (2004) also reflect on the features that contribute to a strongly implemented HRM system. They identified that the meta-features of distinctiveness, consistency and consensus are important to enable a strong situation (Bowen & Ostroff, 2004; Ostroff & Bowen, 2016). These characteristics exceeds the actual content of performance management and reflect on how HRM is implemented. Such strong implementation of HRM affects the strength of situations (Bowen & Ostroff, 2004). As such, a strong performance management system is able to generate desirable effects.

HYPOTHESES DEVELOPMENT

Our first hypothesis proposes that a strong implementation of performance management in teams is able to generate higher levels of backing-up behaviour in teams. The second hypotheses proposes that this relationship can be explained by the shared perceptions about performance management strength that are fostered by a strong implementation of performance management and that contribute to higher levels of backing-up behaviour. Finally, the third hypotheses assumes that the transformational leadership style is able to predict how strong performance management will be implemented in the teams. We summarize this conceptual model in figure 1 and develop these hypotheses hereafter.

Insert figure 1 around here

First, we assume that a strong implementation of performance management fosters team backing-up behaviour. As we already discussed, a strong HRM system is reflected by three meta-features: distinctiveness, consistency and consensus (Bowen & Ostroff, 2004). First of all, when performance management is implemented as a distinctive system, performance management is more likely to be visible, understandable and supported by the authorities (Bowen & Ostroff, 2004). In addition, such distinctive system emphasizes on the relevance of the individual for its team or organization (Bowen & Ostroff, 2004). Hence, the system stands out in the work environment, which is likely to increase the meaning of performance management and, as such, its power to establish a difference in desired behaviours (Bowen & Ostroff, 2004). More specifically, when team members' own role for the team is made more relevant and visible, the team members will be more inclined to demonstrate the behaviour that is expected from them. In addition, they will be more willing to demonstrate desirable team behaviour, such as backing-up behaviour, as they are more likely to be better aware of and feel personally involved to the overall team objectives.

A strong system is also characterized by consistency, which mainly refers to alignment of the different practices of the HRM system (Bowen & Ostroff, 2004). In the case of performance management, such alignment refers to the goalsetting, the monitoring and the evaluation. By being consistent, performance management is able to send a powerful message on which behaviour is expected, supported and rewarded. By remaining constant in what is expected from the team, team members will not only be better aware of what is expected of them by the regular reminder, but also because they know that any effort to demonstrate the desired behaviour will be acknowledged and rewarded (Audenaert et al., 2016). Hence, a consistent performance management system is more likely to foster the desirable attitude and behaviours in the team. Consequently, when employees know what is expected from them and

the team, they will be more willing to demonstrate backing-up behaviour, that helps to attain these expected objectives (Porter, 2005).

Consensus is another meta-feature of performance management that is assumed to create a strong situation (Bowen & Ostroff, 2004). Consensus is created when everybody supports the implemented system and if the system is considered to be fair (Bowen & Ostroff, 2004). Fairness in the performance management process has already been found to generate positive effects (Bauwens et al., 2017) as it fosters the willingness to contribute to the predefined objectives. Even more, the related concept of organizational justice is found to be related to backing- up behaviour (Whitman et al., 2010). Especially in teams were there is a high level of interaction and interdependency (Denisi & Smith, 2014), such higher levels of fairness induced by a strong performance management implementation is expected to increase the level of backing-up behaviour.

Previous studies are limited in their focus on team-level outcomes. However, Van Thielen et al. (2018) demonstrate that several salient features of performance management enable higher levels of team effectiveness. In addition to the studies that demonstrate positive effects of the characteristics of a strong performance management system on the individual level (Audenaert et al., 2016; Van Waeyenberg et al., 2016), we hypothesize as follows:

H1: A strong implementation of performance management is positively related to the backing-up behavior in the team

The importance of shared perceptions of performance management strength
We also propose an explanation for the direct relationship between the implementation of performance management and backing-up behaviour. Further building on the system strength theory (Bowen & Ostroff, 2004) and the multilevel strategic HRM linkages (Wright & Nishii, 2007), we consider shared perceptions of performance management strength as an important

mediating mechanism between the implementation of performance management and backing-up behavior.

First of all, team members' perceptions of HRM are a response to the implementation of HRM (Vermeeren, 2014). As such, team members' perceptions are closer to and thus likely to be more predictive of their ultimate attitudinal and behavioral responses than how performance management is intended or implemented (Kehoe & Wright, 2013). This suggests that perceptions of HRM act as a mediating variable in the relationship between implemented HRM and perceived team level performance (Vermeeren, 2014). Applied to performance management, we assume that the perceptions of team members on how strong performance management is implemented in their team, explain why such a strong implementation results in the desired outcomes.

Previous scholars already highlighted that shared perceptions of team members emerge because of the social and structural stimuli, such as unit norms, leadership and HRM, to which all members of the same team are exposed (Den Hartog, Boon, Verburg, & Croon, 2012). More specifically, teams can be viewed as a series of ongoing events of interdependencies and interactions among individuals over time (Bowen & Ostroff, 2004) which result in collective sense making (Katzenbach & Smith, 1993; J. E. Mathieu et al., 2000). Further following the rationale of Bowen and Ostroff (2004), we assume that when performance management is high in distinctiveness, consistency, and consensus, it enhances clarity of interpretation in the work setting, thereby allowing for similar "cognitive maps" or "causal maps" to develop among employees (Bowen & Ostroff, 2004). We argue that in teams where performance management is strongly implemented, the sense making process will be stronger and most likely be in line with the desired outcomes (Bowen & Ostroff, 2004). Furthermore, we expect that a strong performance management facilitates interactions and interdependencies such that fewer interactions are needed to develop shared interpretations in teams (Bowen & Ostroff, 2004).

In contrast, when performance management is weakly implemented, the related HRM practices will send messages that are ambiguous and subject to individual interpretation. Such ambiguity can result in different types of behaviour among team members, jeopardizing the team objectives, or it can result in a collective sense making opposite of the desired sense making (Bowen & Ostroff, 2004). In such a way, the team can collectively agree on the appropriate behaviour expected by performance management. Hence, the more shared the perceptions on which behavior are expected, supported and rewarded are, the more likely it is that those goals get achieved as well (Bowen & Ostroff, 2004). We hypothesize as follows:

> *H2: The positive relationship between performance management implementation and backing-up behavior is mediated by shared perceptions of performance management strength*

Leadership styles connected to the implementation of performance management
In relation to the actual implementation of HRM systems, Nishii and wright (2007) also argue that the intended practices are often different from the actual implementation, because those in charge of the implementation of HRM rarely apply it perfectly. As it has been recognized that HRM activities are increasingly executed by the line manager (Vermeeren, 2014), they play a crucial role in determining how HRM gets implemented. Consequently, the actual HRM practices varies from team to team because team leaders implement the system differently from each other, but the same for their team. The variability between teams and how they react to HRM may be caused by how line managers differ in implementing the intended HRM policy. Team leaders do not simply act as 'robotic conformists' in transferring the HRM practices (Vermeeren, 2014).

Applying this rationale to the performance management system, we also expect that the implementation of performance management varies between teams and the effectiveness of performance management is determined by how successful the system is implemented in the team. Line managers have the task to put performance management as intended into practice to

influence the attitudes and behaviors of their employees (Bauwens et al., 2017; Van Waeyenberg et al., 2016).

Leadership styles refer to the characteristics, competences and behavior of a supervisor or manager (Huberts, Kaptein, & Lasthuizen, 2007). One such leadership style is transformational leadership. Transformational leaders are close to their team members and motivate them beyond the material benefits (Bass, 1990). They are inclined to transform the values, beliefs and attitudes of their team members in the sense that they want to motivate them to go above and beyond what is expected of them. A transformational leader tries to achieve this by articulating the future vision of the team and the overall organization, encouraging a focus on the goals and showing individual consideration for the employees (P. M. Podsakoff, MacKenzie, Moorman, & Fetter, 1990).

Transformational leadership is characterized by four typical features (Tracey & Hinkin, 1996): two of these characteristics are individually oriented and two of them team-oriented (Pereira & Gomes, 2012). Behaviours related to individualised consideration, referring to the high amount of attention a transformational leader has for each individual member of the team (Avolio, Zhu, Koh, & Bhatia, 2004) and intellectual stimulation, referring to the leader's stimulation of individual development, tend to individually influence employees, since they are directed at each employee. On the other hand, idealised influence referring to the charismatic power of the transformational leader and motivational inspiration, which relates to his or her translation of the overall organizational or team vision, tend to influence the team as a whole, as the emphasis is placed on the level of sharing values and one ideology (Pereira & Gomes, 2012).

We assume a positive relationship between a transformational leader and the implementation of a strong performance management system because the behaviour that transformational leaders carry out to enhance individual and team performance aligns with the

salient features of a strong implementation of performance management. It is expected that the more line managers focus on changing employees to achieve better performance, the more they will search for tools that develop, motivate and provide opportunities for employees. As transformational leaders are strongly inclined to foster transformations in their team, it is likely that such team leader will tend to implement performance management more strongly.

More specifically, transformational leaders consider their team members as individuals. When such leaders implement performance management, they will be more inclined to adopted the system to each individual's needs, increasing the fairness and relevance of such systems (Bowen & Ostroff, 2004). Fairness and relevance are related to bot the features of consensus and distinctiveness of strong HRM systems (Bowen & Ostroff, 2004). The intellectual stimulation of transformational leaders reflects the urge of these leaders to help to develop team members' competences over time. Such team leader is more likely to consider the performance management system as a useful tool to help and develop employees' competences and will recognize the value of the consistency of performance management systems.

In addition, the visionary and charismatic characteristics of transformational leaders are also likely to foster the team leaders' motivation to implement performance management as a tool that indicates the relevance of each team member for the overall team or organization. As clarifying the relevance of the role of employees is linked to the distinctiveness of strong HRM systems (Bowen & Ostroff, 2004), we expect that transformational leaders implement performance management more strongly than leaders with another management style. Moreover, meeting employees' needs for skills and motivation and providing them with opportunities to profile themselves and thereby improve their performance with the performance management system (Appelbaum, 2000; Paauwe, 2009) fits with what transformational leaders are expected to do, given their focus on people (Burke, Stagl, Salas, Pierce, & Kendall, 2006).

This relationship has not yet been examined explicitly in previous research. However recent studies demonstrate positive relations between the transformational leadership style and the implementation of HRM systems in the broader sense (Pereira & Gomes, 2012; Vermeeren, 2014). Building on our rationale and the previous findings, we expect:

H3: Transformational leadership is positively related to a strong implementation of performance management

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Method

The objective of the study is to reveal how performance management fosters team processes and if transformational leadership precedes an effective implementation of performance management. Therefore, we conducted a cross-sectional multiple source survey study at the setting of the Belgian Police Force. The Belgian Police Force is considered to be an appropriate sample as the police is expected to work in teams to efficiently enforce the law and protect each other in dangerous situations (Van Thielen et al., 2018).

The surveys were distributed manually or through the online interface of Qualtrics among twelve local police departments and eleven departments of the Federal Judicial Police Force from February 2017 until March 2018. We distributed a questionnaire for team members and a questionnaire for team leaders. Due to the bilingualism of Belgium, the surveys were distributed in Dutch and French after guaranteeing their validity by means of back-translation by a degreed translator (Chen et al., 2011). The HRM department of the Belgian Police Force reviewed the surveys to check their compatibility with the setting.

A total of 2,419 employees and 477 team leaders filled in the questionnaire. As the focus of the study is on how performance management generates beneficial team-level outcomes, we are particularly interested in the data at the team-level. Therefore, we retained each team with

more than one respondent to prevent inflated standardized effect size estimates and decreased statistical power (Hirschfeld, Cole, Bernerth, & Rizzuto, 2013). To make multiple source data analyses possible, we retained those teams of which the team leader also answered the questionnaire. As such, the final sample includes 115 police teams representing the answers of 635 team members and the responses of 153 team leaders. Because some teams divided the task of implementing performance management among two or three line managers, we averaged these answers to be able to analyze the most correct picture of the implementation of performance management and leadership styles in the teams.

Measures

Transformational leadership style We measured the transformational leadership style by providing the team leaders with the validated scale of Avolio, Bass and Jung (1999) existing of 21 items. The measurement provides statement reflecting the four categories of transformational leadership: the charismatic leader, the visionary team leader and the intellectual- and individual-oriented team leader. An example item is: "*I make my team members proud"*. The validity of the scale was justified with a Cronbach's alpha value of 0.88.

The implemented performance management system We measured the implementation of performance management by asking the team leader how he/she implements the system with in its team by adopting the validated scale of Hauff et al. (2016) based on 7 items which measures the conceptualization of Bowen and Ostroff (2004)'s system strength. An example item is: "*I invest heavily in the full implementation of the performance management system"*. The scale is validated with a Cronbach's alpha of 0.85.

Shared perceptions of performance management system We measured the perceptions on the performance management system by asking team members the 16 validated items of the

scale of Bednall et al. (2014) who was developed to measure the strength of the implemented HRM system. The scale reflects the three main characteristics of a strong performance management system: the consistency of, the distinctiveness of and the consensus about performance management. We adopted this scale to the implementation of the specific HRM system of performance management. An example item is: *"The procedures and practices related to performance management are easy to understand".* Also in this case the Cronbach's alpha of 0.95 is sufficiently high to justify the validity of the scale.

As the perception of the performance management system is measured on the individual level, we examined the statistical adequacy of aggregating at the team-level. We tested whether the average scores differed significantly across teams with one-way analyses of variance (ANOVA) that uses the team to predict the performance management features which was significant at $p < .001$ and by calculating the intra-class correlation (ICC) coefficients, consisting of both ICC(1), indicating the proportion of variance in ratings due to team membership, and ICC(2), indicating whether the teams' means can be used to reliably differentiate between teams (Bliese, 2000). The values of these measurements were sufficiently high to justify aggregation to the team level.

Team backing-up behavior To measure the degree to which a team demonstrates backing-up behavior, we interrogated the team leader on his or her opinion on the extend that their team demonstrates backing-up behavior. To measure this, we used the validated scale of Morisson (1994) that gives six statements on how the team helps each other and other teams. An example item is: *"my team members help others who have heavy workloads".* Cronbach's alpha of 0.92 justified the validity of this scale.

Control variables

We included several control variables that may affect the relationships under study. First of all, the average team tenure was included in our analyses, as team tenure may affect the efficiency of interactions between team members (Mathieu, Maynard, Rapp, & Gilson, 2008). In addition, we included the degree to which team members need to interact to perform their job. The degree of interaction may change how willing team members are to back each other up. As the focus of the study is also on who and how performance management is implemented, characteristics of the team leader are possible influencing our relationships as well. Therefore, we included the age of the team leader as well. Finally, we controlled for the teams' task by including the dummy that measures if the team does operational or supportive work as this also may affect how teams interact (Becker et al., 2016; Bernerth & Aguinis, 2016).

RESULTS

We used the software of SPSS complemented with the program developed by Hayes which enabled us to test the more complex regression models of multiple mediators (A. Hayes, 2013; A. F. Hayes & Matthes, 2009).

Table 1 represents the descriptive information of the variables. Table 2 reports the mutual correlations between every continuous variable. The significance of some of the correlations already indicates the proposed relationships of our hypotheses.

Insert table 1 & 2 about here

Table 3 represents the regression analyses that test our hypotheses. Hypothesis 1 predicted that a strong implementation of performance management fosters backing-up behaviour in the team. M3 of table 3 demonstrates that there is indeed a positive relationship between the

implementation of performance management and team backing-up behaviour (b=0.39, SD=0.09, p=.00). Hence, we can confirm hypothesis 1.

Hypothesis 2 predicted that the perception on the strength of this performance management system explains the relationship between the implemented performance management system and backing-up behaviour. As demonstrated in M4 of table 4, we see that shared perceptions on performance management strength mediates the relationship between the implemented performance management system and backing-up behaviour (b=0.31, SD=0.12, p=0.01). As such, we can confirm hypothesis 2.

Insert table 3 about here

Hypothesis 3 predicted that a strong implementation of performance management depends on the leadership style of whom implements performance management. M5 of table 3 indeed confirms the important antecedent of transformational leadership for the implemented performance management system and the effects it generates in the team. In this final model 5 we can confirm the significance of the sequential mediation of the relationship between transformational leadership and backing-up behaviour by the implementation of performance management and the perceptions on performance management. The direct effect between transformational and backing-up behaviour is significant (b=0.63, SD=0.15, p=.00). More interesting, the indirect effects through both mediators are also significant (b=0.01, SD=0.01, CFI[.00;.05]. The indirect effect between transformational leadership, shared perceptions of performance management and backing-up behaviour is insignificant (b=-0.03, SD=0.03, CFI[-.11;.02] and the indirect effect between transformational leadership, the implementation of performance management and backing-up behaviour is significant (b=0.10,SD:0.05, CFI[.03;.20]. As such we can confirm hypothesis 3.

DISCUSSION

The study examines how a strong implementation of performance management relates to backing-up behaviour in teams, through shared perceptions about performance management strength and preceded by transformational leadership. The study confirms that a transformational leader is more likely to implement a strong performance management system. Such strong implementation is found to generate more shared perceptions about performance management strength and ultimately results in higher backing-up behaviour in teams.

The study contributes to the literature in multiple ways. First, the study is able to confirm that performance management is able to generate beneficial team outcomes. As such, the study adds to previous studies in the performance management field that either remained on the individual level to demonstrate the importance of a strong implementation of performance management (Audenaert et al., 2016; Decramer et al., 2013) or only provided theoretical assumptions of performance management benefits for teams (Aguinis et al., 2013; Denisi & Smith, 2014). In addition, the study contributes to the current literature as it is able to detect the underlying mechanism that explains how performance management generates desirable higher level outcomes. As proposed by Bowen and Ostroff (2004), the study confirms that the implementation of performance management indeed differs between teams (Vermeeren, 2014) and is able to generate different effects. Hence, by including the determining aspects of the implementation and perceptions of HRM systems, the study is able to link implemented performance management systems to higher level outcomes.

Second, the study incorporates the leadership literature (Avolio, Bass, & Jung, 1999; Bass, 1990) to the system strength literature (Bowen & Ostroff, 2004; Ostroff & Bowen, 2016) by considering how performance management implementation is preceded by the transformational leadership style. The study goes beyond explanations on the organizational

level and identifies that the implementation of performance management is determined at lower, team levels (Vermeeren, 2014; Wright & Nishii, 2007). Such differences are found to be caused by differences in leadership styles by the supervisors who implement performance management. As such, our study supports the view that transformational leaders play a considerable role in implementing HRM (Pereira & Gomes, 2012; Vermeeren, 2014). Even more, the study adds to this literature stream and the more specific performance management literature stream (Bauwens et al., 2017; Van Thielen et al., 2018) by identifying the beneficial characteristics of a transformational leader that foster a strong implementation of performance management.

Limitations and further research

Apart from these valuable contributions to the theory, the study should be seen in the light of several limitations. First of all, even though we used multiple sources to test our model and analyzed aggregated individual data to the team level, it remains a cross-sectional study. As the surveys were taken at one moment in time, the study is unable to empirically confirm any causal relations. Therefore, we would encourage further studies to explore experimental or longitudinal study designs that confirm the theoretically assumed causal linkages between transformational leadership, the implemented performance management system, the shared perceptions about performance management strength and backing-up behaviour in teams.

Another limitation can be found in the limited examination of leadership styles in our model. We focused our attention to the transformational leadership style as this style is theoretically the closest linked to a strong implementation of performance management. Nevertheless, other leadership styles could be beneficial for performance management as well. For instance, transactional leaders are recognized to manage by expectations. This inherently includes that they indicate what they expect from their employees and will punish or reward

these expectations afterwards. This characteristic of transactional leaders can be linked to the consistency of performance management and, as such, may be an effective leadership style as well. Therefore, we would warrant future research to focus on different leadership styles to determine how other leadership characteristics may be beneficial (or detrimental) for an effective implementation of performance management.

Finally, the generality of our findings would also benefit from studies held in different work environments. A recent study of Van Thielen et al. (2018) indicated that the work environment can change the outcomes of performance management. As the focus of this study mainly lies on the team-level and how mechanisms on that level generates outcomes, we expect the influence of environmental aspects to be limited. However, such influence remains possible. Especially in light of the differences in interdependencies and collaborations of different work teams (Marks et al., 2001), differences in how performance management generate desirable team outcomes may differ (Denisi & Smith, 2014). We therefore encourage future research to examine our model in organizations with different degrees (Saffie-Robertson & Brutus, 2013) and different types (Hollenbeck, Beersma, & Schouten, 2012) of team work.

Practical contributions

The study does not only advance theory in the related research fields, it also contributes to the management world. We were able to connect two important management practices omnipresent in organizations: leadership and performance management. Where previous studies were able to formulate practical contributions for those two practices separately, we are able to connect them.

We identified that characteristics of a transformational leader are beneficial for an effective implementation of performance management. As such, we can state with confidence

that organizations should provide training that focuses on leadership and performance management simultaneously. It is an opportunity for organizations to consider performance management as an effective tool in which leaders can express their transformational leadership style. More specifically, organizations should focus on the training of their supervisors that is oriented towards demonstrating the transformational leadership style and should connect the effective implementation of performance management as a direct and hands-on practice to make transformational leadership apparent. Hence, by providing such incorporating training organizations will increase the effectiveness of both their leaders and their performance management system simultaneously, generating higher beneficial effects in their teams, and ultimately their organization.

CONCLUSION

We study how performance management is able to generate team outcomes. Building on the HRM system strength theory of Bowen and Ostroff (2004), the study was able to determine that a strong implementation of performance management generates higher backing-up behaviour in teams. This relationship is explained by the shared perceptions of team members about performance management strength. In addition, the study is also able to detect what precedes a strong implementation of performance management. By including the leadership literature, the study identified that transformational leaders are more likely to implement performance management as a strong system. These findings let us assume that performance management can be a useful tool, rather than an ambush, for teams.

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Table 1.

Descriptive information

	Mean(SD)	Min	Max
Transformational leadership	5.53(0.49)	4.14	6.67
strong performance management	4.83(0.66)	2	6.67
Shared perceptions of performance management strength	3.71(0.66)	1.92	5.18
Backing-up behaviour	5.65(0.88)	3.17	7
Team interdependency	5.10(0.82)	2.92	7
Team leader age (in years)	48.53(7.85)	30	62
Team tenure (in years)	5.32(3.27)	0	16

Function	Supportive staff (=0)	Operational staff (=1)
	N 15	N 100

Table 2.

Correlation table

variables	1	2	3	4	5	6	7
1.Transformational leadership	-						
2.strong performance management	,254**	-					
3. shared perceptions of performance management strength	-,011	,301**	-				
4.Backing-up behaviour	,422**	,396**	,304**	-			
5.Team interdependency	,088	,185*	,299**	,190*	-		
6.Team leader Age	,110	,113	-,050	,116	-,103	-	
7.Team tenure	,172	,072	,005	,031	-,082	,244**	-

Note: For teams, $n = 115$ *** $p < .001$. ** $p < .01$. * $p < .05$.

Table 3.

Regression analyses with unstandardized coefficients

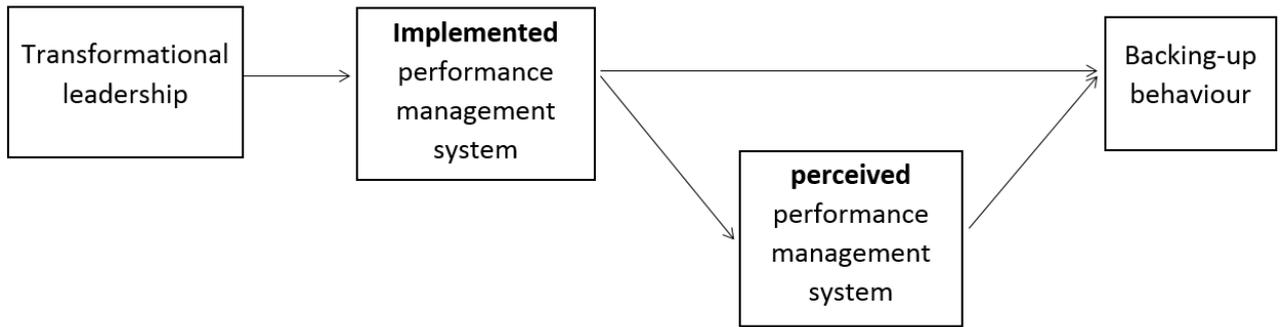| Variables	M1: implemented performance management	M2: perceptions on performance management	M3: Backing-up behaviour	M4: Backing-up behaviour	M5: Backing up behaviour
Constant	1.06(1.10)	2.73(0.80)***	2.41(0.76)	1.88(0.73)*	-0.99(1.00)
Team tenure	-0.01(0.03)	-0.00(0.02)	0.01(0.03)	0.01(0.02)	-0.00(0.02)
Team interdependence	0.18(0.10)†	0.21(0.07)**	0.14(0.09)	0.06(0.10)	0.02(0.09)
Task	-0.38(0.25)	-0.34(0.18)†	0.44(0.24)†	0.53(0.24)*	0.44(0.22)*
Age team leader	0.02(0.01)	-0.00(0.01)	0.01(0.01)	0.00(0.01)	0.00(0.01)
Transformational leadership	0.44(0.17)**	-0.12(0.13)	-	-	0.63(0.15)***
Strong performance management		0.24(0.09) **	0.39(0.09)***	0.33(0.09)***	0.24(0.09)**
Shared perceptions on performance management strength				0.31(0.12)***	0.35(0.12)***
R²	0.12	0.19	0.20	0.24	0.35
F-value	3.03**	4.25***	5.39***	5.73***	8.15***
Direct effect					0.63(0.15) [0.33;0.93]
Indirect effect					0.03(0.02) [0.00;0.09]

Note: For teams, $n = 115$ *** p <.001. ** p < .01. * p < .05.

Figure 1: conceptual model