

Mind the gap: Intended versus perceived human resource practices and knowledge sharing of line managers and employees

Tatiana Andreeva¹  | Veronika Kabalina² | Maral Muratbekova-Touron³ 

¹School of Business, Maynooth University, Maynooth, Ireland

²Graduate School of Business, National Research University Higher School of Economics, Moscow, Russia

³ESCP Business School, Paris, France

Correspondence

Tatiana Andreeva, School of Business, Maynooth University, Maynooth, Ireland.
 Email: tatiana.andreeva@mu.ie

Abstract

Understanding how human resource (HR) management can stimulate knowledge sharing among employees has received considerable attention recently. However, the extant research has focused predominantly on which HR practices are used and has paid little attention to how they are implemented. Building on both perspectives, we explore the nature of the gaps between intended and perceived HR practices and the effects of these gaps on knowledge-sharing behaviours. Based on a survey of 198 respondents from a high-tech company, we found that the gaps between intended and perceived HR practices (a) can be multidirectional, that is, both underestimation and overestimation of HR practices exist; (b) differ in their magnitude between line managers and employees; and (c) have varied effects on knowledge-sharing behaviours—they can be positive, negative or have no impact, and these effects differ between line managers and employees. We discuss a range of conceptual, methodological and practice implications of these findings.

KEYWORDS

HRM content, HRM implementation, HRM process, intended and perceived HR practices, knowledge sharing, line managers

INTRODUCTION

Knowledge sharing among employees has been recognized as playing a critical role in organizational competitive advantage (Argote & Ingram, 2000). It has aroused interest in how this behaviour can be fostered with the help of human resource management (HRM) interventions (e.g., Chuang et al., 2016; Jackson et al., 2006; Minbaeva, 2013). This literature notes that knowledge sharing is a particularly challenging behaviour to promote (Donnelly, 2019; Mabey & Zhao, 2017). First, knowledge-sharing behaviours are often discretionary or extra-role, that is, they depend on the goodwill of employees to engage in them and are therefore difficult to facilitate and control via organizational incentives (Foss, 2007; Gagné, 2009). Second, knowledge sharing involves a substantial amount of ambiguity, uncertainty and risk due to the very nature of knowledge (Foss, 2007). In addition, it has been argued that knowledge sharing represents a social dilemma in which the

risks and costs of sharing for an individual might outweigh the collective benefits of doing so, and thus, individuals might be motivated to refrain from sharing (Cabrera & Cabrera, 2002).

The extant HRM literature has not yet offered a clear-cut solution to this conundrum. On the one hand, a range of studies propose specific HR practices that are expected to boost employee knowledge sharing (e.g., Good et al., 2022; Liu & Liu, 2011; Lombardi et al., 2020). On the other hand, another stream of research suggests that HR practices have a stronger impact when they are used jointly and hence advocates for application of a coherent HRM system to achieve this aim. Building on the AMO framework (Jiang, Lepak, Hu et al., 2012), such HRM systems are typically envisioned as including a range of ability-enhancing, motivation-enhancing and opportunity-enhancing practices that could stimulate knowledge sharing (e.g., Andreeva & Sergeeva, 2016; Foss et al., 2009). At the same time, some critical voices (e.g., Andreeva

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDeriv](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. *European Management Review* published by John Wiley & Sons Ltd on behalf of European Academy of Management (EURAM).

et al., 2017; Andreeva & Sergeeva, 2016; Minbaeva, 2013) suggest that as knowledge behaviours are very particular, having more HR practices may not always be beneficial, as this can be perceived by employees as over-controlling on the part of the organization and hence a hindrance to the intrinsic motivation to share.

All these discussions have predominantly focused on which HR practices should be used to foster knowledge sharing and has largely overlooked how these practices are implemented and perceived. In other words, the extant literature focuses on HRM content rather than on the HRM process aspects that have garnered attention recently in the strategic HRM literature (e.g., Sanders et al., 2014). The HRM implementation (also called HRM process) literature suggests that how HR practices are implemented is critical to understanding how HRM yields individual and organizational-level outcomes (e.g., Cao et al., 2022; Trullen et al., 2020). Therefore, to better equip HR practitioners to manage knowledge sharing in their organizations, it is important to understand how HRM implementation aspects influence knowledge-sharing behaviours; and current knowledge in this respect is very limited.

To address these shortcomings, we turned to the literature that has explored HRM implementation in general (Trullen et al., 2020) in order to use some of its insights to understand how HRM can enhance knowledge sharing. One of the cornerstone concepts of the HRM implementation literature is the potential discrepancy (often referred as a gap) between intended (planned) and experienced (perceived) HR practices (Khilji & Wang, 2006; Wright & Nishii, 2007). Indeed, empirical work has demonstrated that the correlations between intended and perceived practices are quite weak (e.g., Liao et al., 2009). Recent studies offer some insights into why and how these gaps may arise (e.g. Makhecha et al., 2016; Piening et al., 2014) while there is scarce empirical evidence of the detrimental effects of these gaps on individual and organizational outcomes (Khilji & Wang, 2006). The acknowledgement of the potential discrepancies between intended and experienced HR practices has led to increased attention to the role of line managers as intermediaries in the causal chain between HR practices and organizational outcomes (Sikora & Ferris, 2014). Thus, a number of recent studies have looked at how line managers influence employee-level outcomes (e.g., Alfes et al., 2013; Den Hartog et al., 2013; Fu et al., 2020).

In sum, extant research clearly signals that the HRM implementation process needs to be included in the discussion on how to foster knowledge sharing through HRM interventions. But what do HR managers need to do specifically in this regard? The HRM implementation literature, while offering some useful insights, still leaves many questions about intended–

perceived gaps unanswered. For example, should organizations strive to minimize all potential gaps between intended and perceived HR practices aimed at fostering knowledge sharing? To answer this question, we need a more in-depth and fine-grained understanding of the nature of these gaps and their influence on knowledge-sharing behaviours. For example, we do not know whether the gaps are always dysfunctional (cf., Alvesson & Kärreman, 2007; Trullen et al., 2020), and if they are, whether the gaps in some practices are more detrimental than others. If not all gaps are made equal, which HR practices are more liable to deviate from HR intentions? Furthermore, little research has been done on how line managers perceive HR practices and how much the potential intended–perceived gaps matter to line managers themselves. Bearing in mind that line managers serve as role models for their subordinates (e.g., Alfes et al., 2013), their own behaviours and the factors that drive them are of particular importance. This is especially relevant for extra-role or voluntary behaviours like knowledge sharing, where the example set by leaders has been found to be particularly impactful (Carmeli et al., 2013).

A lack of understanding on these questions prevents organizations from developing meaningful and targeted interventions to enhance knowledge sharing. To address these shortcomings, and dovetailing ideas from the HRM implementation literature and that on knowledge sharing, in this study we set out to explore what gaps exist between intended and perceived HR practices aimed at promoting knowledge sharing, whether or not line managers and employees perceive these gaps similarly, and how these gaps may influence their knowledge-sharing behaviours. We explored these questions in the context of a high-tech company, where we surveyed 198 respondents (129 employees and 69 line managers) from two units where knowledge sharing is an important aspect of the respondents' work. We designed this study following the guidelines of quantitative discovery (Bamberger & Ang, 2016). Such a question-driven, exploratory approach has been found to suit particularly well situations where prior research is limited or offers unclear predictions (Graebner et al., 2022).

Our study makes several contributions to the HRM literature. First, our study contributes to the literature on HRM for knowledge sharing by incorporating the HRM implementation perspective and demonstrating that not only the content of HR practices intended to enhance knowledge-sharing behaviour but also HRM implementation aspects influence knowledge sharing in organizations. By demonstrating that these aspects matter differently for knowledge sharing among line managers and employees, we enhance our understanding of how *who* shares knowledge may influence knowledge-sharing patterns—an aspect that has been overlooked in the literature (Andreeva & Sergeeva, 2016). In doing so, our

study sheds further light on the micro-foundations of knowledge management in organizations (Foss, 2009). Second, our paper contributes to the HRM implementation literature: by revealing the multidirectional nature of the gaps, the varied effects they may have on individual behaviours and the variance between line managers and employees, it challenges some of the assumptions of this literature and proposes ideas for future theorizing and empirical research. By demonstrating that intended–perceived gaps matter differently for individual behaviours depending on the content of HR practice, our study also highlights the complementary nature of both content and process explanations in strategic HRM (Hu et al., 2022; Katou et al., 2014; Sanders et al., 2014).

The remainder of the paper is structured as follows. First, we briefly review what we already know from the HRM process literature about the gaps between intended and perceived HR practices and the role of line managers, and about the implementation aspects of HRM designed to promote knowledge sharing. Next, we introduce our exploratory study, including the conceptual and methodological choices we made, our sample and measures. We then present our findings and conclude by discussing the implications for theory and future research.

THEORETICAL BACKGROUND

An overview of the HRM implementation literature

Research has shown that HRM intention and practice are not necessarily identical, and a gap that may occur between the two is one of the important determinants of individual and organizational performance (e.g., Khilji & Wang, 2006). Extending this logic, Wright and Nishii (2007) differentiated between three aspects of HRM: *intended* HR practices as designed by the company's decision makers, *actual* HR practices as those really implemented in the company and *perceived* HR practices as experienced by employees. An acknowledgement of the discrepancies between these aspects has shifted the focus towards perceived HR practices as key predictors of employee-level outcomes (e.g., Beijer et al., 2019; Jiang et al., 2017; Nishii et al., 2008) and has fuelled research in several interconnected directions that focus on the 'what', 'how' and 'why' of HR perceptions by employees (van Rossenberg, 2021; Wang et al., 2020). Specifically, the 'what' stream focuses on what HR practices employees ultimately perceive and how they differ from intentions – that is, on the gaps between intended, implemented and perceived HR practices (e.g., Khilji & Wang, 2006; Nishii et al., 2008; Wright & Nishii, 2007); the 'how' literature focuses on how organizations could better communicate their HR policies and practices to employees (e.g., Bowen & Ostroff, 2004; Ostroff &

Bowen, 2016); and the 'why' stream explores employees' interpretations (attributions) of HR practices (e.g., Alfes et al., 2021; Hewett et al., 2018; Nishii et al., 2008). In addition, the HRM implementation literature throws a spotlight on the role of line managers in this process (e.g., Den Hartog et al., 2013; Fu et al., 2020; Guest et al., 2021; Purcell & Hutchinson, 2007; Sikora & Ferris, 2014). While this research provides useful insights, a number of questions remain unanswered.

First, most of the research referred to above works on the assumption that intended–perceived HRM gaps are detrimental both to employees and to firm performance, and should be minimized (Wright & Nishii, 2007). However, only a few empirical studies have focused on the gaps and empirically investigated how they emerge (Makhecha et al., 2016; Piening et al., 2014) and influence individual-level outcomes (Khilji & Wang, 2006). This limited empirical evidence is inconclusive. Khilji & Wang (2006) found that lower gaps between intended and implemented HR practices led to higher employee satisfaction with HRM, which in turn predicted organizational performance. Conversely, Alvesson & Kärreman (2007) found that despite discrepancies between intended and implemented HR practices, employees had positive interpretations of the HRM system and thought it worked well. Makhecha et al. (2016) did not directly explore the effects of the intended–perceived HRM gaps on individual behaviours, yet their findings suggest that at least in the short term, such gaps were perceived by line managers as functional because the gaps enabled them to cope with operational pressures and demands. Makhecha et al. (2016) also posit that not all gaps may be equally dysfunctional and suggest future research to differentiate between value-destroying, value-neutral and value-enhancing gaps in HR practices. In a similar vein, Trullen et al. (2020) point out that detecting a difference between actual and intended HR practice may not necessarily be a sign of ineffective implementation, as the practice might have been intentionally changed to fit better into the specific working context. To summarize, we do not have enough evidence to unequivocally support the assumption that intended–perceived HRM gaps are always dysfunctional—and hence should be always minimized.

Furthermore, recent evidence indicates that gaps are likely to vary across different HR practices as they are subject to line managers' discretion to different degrees (Lopez-Cotarelo, 2018; Makhecha et al., 2016). For example, training or rewards are typically managed centrally, and line managers may have a limited capacity to modify them, while the provision of non-monetary recognition may be within their discretionary remit. Therefore, the aggregation of various HR practices into an overall HR system that has been used in some of the studies on gaps (Khilji & Wang, 2006; Piening et al., 2014) risks overlooking both the nuances in gaps across various HR

practices and the differences in the impact these gaps have. The research on HRM implementation also suggests that due to the complexity of this process, with multiple contingencies, stages and agents involved (e.g., Bos-Nehles et al., 2021; Bos-Nehles & Meijerink, 2018; Mirfakhar et al., 2018; Trullen et al., 2020; van Mierlo et al., 2018), it is unlikely that all the gaps could be eliminated fully even if HR managers endeavoured to do so. Therefore, it would be useful to understand which gaps are particularly wide and particularly damaging (if so), so that managers can focus their efforts on minimizing the gaps that require the most attention.

Finally, focusing on line managers' contributions to the HRM-performance causal chain, the extant research either considers them to be more passive implementers (e.g., Pak & Kim, 2018) or acknowledges that they could play a more active role in shaping, translating and even modifying HR practices (Den Hartog et al., 2013; Guest et al., 2021; Kehoe & Han, 2020; Lopez-Cotarelo, 2018). Either way, such an approach puts most of the blame for potential gaps on their shoulders (Guest et al., 2021). We suggest that this approach, while being informative, overlooks the fact that before implementing any HR practices, line managers first perceive and interpret what HR has intended. These perceptions shape how line managers behave and what HR messages they communicate to their employees. Indeed, it has been demonstrated that line managers' perceptions of HR practices play a significant role in explaining how HR practices relate to employee behaviours and performance (Jiang et al., 2017; Li & Frenkel, 2017). However, we know little about how line managers perceive various HR practices, and if and how their perceptions deviate from HR intentions.

Extending this idea further, van Rossenberg (2021) recently pointed out that to get a better insight into the HRM implementation process, we need not only to include line managers' perceptions of HR practices in the picture but also acknowledge and explore variations in HR perceptions both within each of the groups (line managers and employees) and between the groups. Reviewing the extant research, van Rossenberg (2021) concludes that empirical studies on such within-group and between-group differences in perceptions of HR practices are virtually non-existent.

Promoting knowledge sharing: Through the lens of HRM implementation

Although not using the language of the HRM process literature explicitly, the literature on managing knowledge sharing has addressed some aspects of HRM implementation. First, some of the extant research suggests that to address the ambiguity and risks inherent to knowledge sharing, HRM policies should send clear

messages about the importance of this behaviour for an organization (Cabrera & Cabrera, 2002). For example, rewards for knowledge sharing can be interpreted by employees as a signal that this behaviour is important (Guest et al., 2021); therefore, perceived inconsistency around this HR practice may lead to the reverse perception—that this behaviour is not valued or relevant to the organization. At the same time, Alvesson and Kärreman (2007) pointed out that knowledge workers prefer some ambiguity in management practices, because it gives them more autonomy—which, in turn, has been consistently found to be one of the key drivers of knowledge sharing (Andreeva & Sergeeva, 2016; Foss et al., 2009). Although not being fully aligned with each other, these ideas speak to the 'how' element of the HRM process, focused on the strength, consistency and clarity of HRM signals.

Second, some of the discussions in the literature on knowledge sharing point to the importance of the 'why' element of the HRM process (implementation). Indeed, discussing the effects of rewards on knowledge-sharing behaviour, Foss et al. (2009) suggest that the employee's interpretation of these rewards can change their effect. Specifically, these rewards could be perceived by employees either as controlling their behaviour or as acknowledging their contributions and expertise and hence trigger either extrinsic or intrinsic motivations to share, which in turn can either damage or boost knowledge-sharing behaviour (Andreeva & Sergeeva, 2016; Foss et al., 2009). In other words, this idea suggests that the same HR practices can be interpreted differently by employees and these interpretations, or 'attributions' in the language of the HRM process literature (Nishii et al., 2008; Sanders et al., 2014), matter for knowledge-sharing behaviours.

However, the 'what' aspect of HRM implementation—that is, the gaps between intended and perceived HR practices and their potential effects—has not been explored in the literature on HRM for knowledge-based performance. Minbaeva (2013) argued that the distinction between intended, implemented and perceived HR practices could enhance our understanding of how to promote knowledge sharing, but empirical work, to the best of our knowledge, has not yet followed this suggestion. At the same time, the existing evidence does not clearly indicate how such potential gaps in the HRM implementation chain may influence knowledge sharing. Indeed, on the one hand, one could argue that the gaps between intended and perceived HR practices may indicate inconsistency or insufficiency of signals about the importance of knowledge sharing, and may therefore decrease employees' willingness to share their knowledge. On the other hand, as knowledge sharing is often an extra-role behaviour driven by intrinsic motivation, the gaps in HR practices may not have any effect on this behaviour as the practices themselves would be considered by an employee as irrelevant. Finally, employees

might react to the gaps positively, considering them as a sign of organizational flexibility and providing more autonomy (Alvesson & Kärreman, 2007), and thus engage more actively in knowledge sharing.

Interestingly, the literature on knowledge sharing has also acknowledged the role of line managers—but in a different way to the HRM process literature. As well as providing evidence of their contribution to facilitating employee knowledge sharing by using specific leadership styles, nurturing positive climate and building trust (e.g., Srivastava et al., 2006), the literature also highlights their potential to shape employee behaviours by being knowledge sharing role models themselves (Carmeli et al., 2013; Nifadkar et al., 2019). These considerations suggest that it is important to understand what drives knowledge sharing among line managers and how these behaviours are affected by intended–perceived HR gaps.

To summarize our review of the extant literature, the research on HRM for knowledge sharing has largely neglected HRM implementation aspects. At the same time, the HRM implementation literature, while offering some valuable insights into this process, keeps a wide range of questions open—and many of these are particularly relevant from the perspective of managing knowledge sharing. To address this, in this study, we set out to explore the nature of the gaps between intended and perceived HR practices for employees and line managers, and the effects of these gaps on their knowledge-sharing behaviours, following the guidelines of quantitative discovery (Bamberger & Ang, 2016).

METHODS

Study design

In designing this study, we followed several considerations that depart from the mainstream HRM implementation literature and hence require some explanation. First, we suggest that line managers play a dual role in the HRM–performance causal chain—they are *both* recipients and implementers (or modifiers) of HR intentions. Given that line managers should ideally serve as role models by being active in knowledge sharing, we suggest it is particularly important to consider line managers as recipients of HRM intentions aimed to boost knowledge sharing, and to explore how they perceive intended HR practices and how they react to the potential discrepancies between intended and perceived HR practices.

Second, guided by this focus on line managers as recipients of HRM signals, in this study, we focus on the intended–perceived gap, rather than on intended–implemented or implemented–perceived gaps. Indeed, as line managers' perceptions of HR practices precede their actions to implement HRM, the implemented–perceived

gap does not exist for them. In addition, to be able to contrast the gaps between line managers and employees, the intended–perceived gap is the most relevant baseline for comparison. Finally, while the gaps may emerge at the implementation level, it is perceived HR practices—rather than implemented ones—which ultimately influence behavioural outcomes (Hu et al., 2022; Kehoe & Wright, 2013). Furthermore, it has been suggested that managing perceptions of HR practices could be more important for achieving outcomes than the actual practices themselves (Stavrou & Ierodiakonou, 2016). Therefore, focusing on the gaps that involved perceived HR practices allowed us to explore the most proximal predictors of employee knowledge-sharing behaviours among those in the HRM implementation chain. This approach is in line with the recent proposal of van Rossenberg (2021), who suggested that contrasting the perceptions of the same HR practices between managers and employees can provide additional insights into the HRM implementation process.

Data collection and sample

We focused our data collection within one firm, as this allowed us to keep constant the intended HR practices and contextual organizational-level variables (e.g., organizational strategy, structure and culture) and thus to focus on variance in HR practices perceived by employees and line managers (cf., Den Hartog et al., 2013), as well as enabling us compare gaps across different HR practices to provide a more nuanced and realistic account of the HRM implementation process (Makhecha et al., 2016).

The sample organization works in the space technologies industry in Russia and employs around 10,000 employees. We interviewed the HR director and few of their subordinates first to better understand the context of this particular organization. Based on these interviews, two organizational units—R&D and administration—were selected for our study because knowledge sharing is an important component of daily work for both line managers and employees and is critical to a company's success. These units have a three-level hierarchy of job positions, titled 'manager', 'senior specialist' and 'specialist', respectively. Both the 'manager' and 'senior specialist' job positions, while having a different scope in terms of decision-making impact, have managerial responsibilities and thus belong to line management, in line with Fu et al. (2020) who define line managers as those responsible for directly managing the on-the-job activities of subordinates. 'Specialist' jobs are confined to task execution.

As managing knowledge is critical to the company's success, knowledge management tools (e.g., databases and intranet) are centralized and uniform across the

whole organization. HR policies developed by the HR department to promote knowledge-sharing behaviours in these two units are standardized, identical and do not differentiate between employee groups or positions at the different levels of organizational hierarchy. Line managers act mainly as implementers of HR practices and, formally, are given little discretion to change them. Line managers in both units receive training from the HR department when new HR practices or policies are introduced.

The survey data were collected in July 2017 using the pen and paper format, ensuring confidentiality and anonymity of the answers. There were 198 questionnaires usable for analysis collected, 95 from the R&D unit and 103 from the administration unit, with an approximate 45% response rate. Of these respondents, 70% were male, 84% had higher education and 94.4% had worked for our focal organization for more than 1 year. Of the respondents, 18% had the 'manager' job title, 17% were 'senior specialists' and the remaining 65% were 'specialists'. This profile broadly reflects the overall employee population in our focal units.

Employees and line managers answered the questions about perceived HR practices, as well as knowledge-sharing behaviour. The survey on intended HR practices mirrored the questions on perceived HR practices that were posed to line managers (managers and senior specialists) and employees (specialists) and was filled in by the HR director by email (similarly to the approach taken by Den Hartog et al., 2013).

Measures

HR practices to enhance knowledge-sharing behaviours

To account for the potential differences in gaps across different HR practices, we followed the literature on HRM systems (Jiang, Lepak, Hu, et al., 2012; Lepak et al., 2006) and differentiated between HR practices that enhance employees' abilities, foster motivation and provide opportunities to perform. Lepak et al. (2006) also highlight that HRM systems should be targeted to some strategic objective. Therefore, in line with the focus of our study on knowledge sharing, we focused on the HR practices that were aimed, respectively, at enhancing employees' abilities to share knowledge, fostering their motivation to share, and providing relevant opportunities. We build on previous work that has theorized about the content of such practices and validated relevant scales (Andreeva & Sergeeva, 2016; Foss et al., 2009).

The measure for *ability-enhancing HR practices* was adopted from Andreeva and Sergeeva (2016). It included three items asking respondents to indicate to what extent their organization provided training to develop interpersonal communication skills, teamwork skills, self-

reflection and knowledge-externalization skills. For motivation, in line with past research (e.g., Andreeva & Sergeeva, 2016; Foss et al., 2009), we included practices that were aimed at boosting two different types of motivation, intrinsic and extrinsic ones. The measure for *intrinsic-motivation-enhancing HR practices* was based on the three-item scale validated by Foss et al. (2009) that explores the extent to which the respondent's job is characterized by autonomy. The *extrinsic-motivation-enhancing HR practices* measure was adopted from Andreeva and Sergeeva (2016) and included three items that explore the extent to which the organization provides monetary or non-monetary rewards specifically for knowledge sharing and includes knowledge sharing as a component in employee performance evaluations. Finally, *opportunity-enhancing HR practices* were measured with the scale developed by Wu et al. (2007) that includes a range of opportunities for social interaction between employees, such as formal and informal meetings and mentoring programmes. To make sure that our selected scales of HR practices made sense in our focal units, we discussed them with the HR director and they confirmed that the HR practices listed applied to these units.

The extant literature operationalizes perceived HR practices in different ways, using descriptive or evaluative measures (Beijer et al., 2019) that could be either observation or experience based (Wang et al., 2020). We opted for the descriptive observation-based approach, as the other options carry a higher risk of the common method bias (CMB) (Beijer et al., 2019) and suffer from the performance-cue effect (Wang et al., 2020). It is important to note that the choice of approach to measurement in this case goes beyond a technical methodological issue, as different operationalizations of perceived HR practices reflect complementary but distinct constructs. In this study, we focused on the perceived existence of HR practices. Hence, the HR director reported what HR practices were intended to be used in the organization (using the lists of practices from the scales mentioned above), while line managers and employees reported what HR practices from these lists they perceive as existing in the organization.

Gaps between intended and perceived HR practices

The data for this measure come from two sources: from employees for perceived HR practices and from the HR director for intended HR practices. We calculated the gaps for each respondent in our sample as a difference between the average index of each intended group of HR practices as seen by the HR director and the average index of the employee's view of this group of HR practices. Although difference scores have their limitations (e.g., Edwards, 2001), in this situation, they represent a direct operationalization of the focal construct. To allow us to isolate the magnitude of the gap from its direction,

we operationalized the magnitude in the gaps as a separate variable. To do so, we converted the gap scores to their absolute values so that the higher the score of the gap, the higher the intended–perceived discrepancy, that is, the magnitude of the gap.

Individual knowledge-sharing behaviour was measured using a five-item scale adapted from Hsu et al. (2007).

Position in organizational hierarchy

Respondents were asked to self-report their position in the organization, distinguishing between department managers, senior specialists and specialists.

Controls

The intensity of an individual's knowledge-sharing behaviour may be naturally dictated by *task interdependence* with colleagues as an element of the individual's job design. We controlled for this aspect, adopting the scale from Van Der Vegt, Emans and Van De Vliert (2000). We collected the data on gender, age, education and overall work experience of our respondents, as well as their tenure in the focal organization. Finally, we controlled for the departmental affiliation of our respondents.

Responses to all scale-based questionnaire items were scored on a six-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). All scale-based items are presented in the Appendix A.

Evaluation of the measurement model

Assessment of common method bias (CMB)

We followed Podsakoff, MacKenzie and Podsakoff (2012) to minimize the risks of CMB. We pretested the scale items with the practitioners in the field to ensure that the wordings were clearly understood; we carried out interviews with the HR director of our target company to ensure that the questions make sense in the context of our focal organization. We explicitly assured our informants of the confidentiality and anonymity of the data collection process. After data collection, we conducted a Harman's one-factor test (Podsakoff & Organ, 1986) to assess the possibility of such bias. Only the 28.18% of variance was explained by a single factor. These design and statistical measures indicate that CMB is unlikely to be a serious concern in this study.

Validity and reliability of the measures

Following Bello-Pintado (2015) and Hauff (2021), we conceptualized and statistically treated our measures for

opportunity-enhancing, extrinsic-motivation-enhancing and ability-enhancing HR practices as formative indices. Indeed, organizations do not necessarily use HR practices together, and they may use different practices to achieve the same goal (Hauff, 2021)—for example, to incentivize employees to share their knowledge. Therefore, a number of authors have recommended, based on conceptual considerations, that HRM systems should be captured as formative constructs (e.g., Delery, 1998; Hauff, 2021; Jiang, Lepak, Han, et al., 2012). In addition, a careful inspection of the items on these three scales suggests that they fit with the core criteria for formative constructs (e.g., Hair et al., 2017; MacKenzie et al., 2005).

Following Hair et al. (2017), we assessed the formative measures for collinearity issues and evaluated the significance and relevance of the formative indicators. All variance inflation factors for formative indicators were below the threshold of 5 (the highest VIF was 3.4), so collinearity was not an issue. Screening the significance and relevance of the formative indicators, we retained those of them that either had significant outer weights or had high and significant outer loadings. Based on this assessment, the measures of extrinsic-motivation-enhancing HR practices and ability-enhancing HR practices remained as in the original source, and opportunity-enhancing practices were split into two distinct groups of practices: those providing opportunities for meetings and discussions with wider groups of colleagues and those providing structured opportunities for more focused dyadic interaction through mentorship. In addition, several indicators were excluded from the opportunity-enhancing HR practices—meetings measure (see Appendix). This appears to be in line with the findings of Andreeva and Sergeeva (2016), who also had to shorten the original scale from Wu et al. (2007).

Job autonomy, knowledge-sharing behaviour and task interdependence were treated as reflective measures, as these scales fit the criteria for such constructs (Hair et al., 2017). The values of composite reliability, Cronbach's alphas and average variance extracted (AVE) for these constructs are presented in Table 1. All of these indicators are above the recommended thresholds (Hair et al., 2017). In sum, the assessment of our measurement model suggests the validity and reliability of the operationalizations of the concepts used.

TABLE 1 Scale reliability measures for the reflective variables

Variables	Cronbach's alpha	CR	AVE
Knowledge-sharing behaviour	0.895	0.767	0.825
Autonomy	0.895	0.769	0.824
Task interdependence	0.632	0.626	0.544

RESULTS

Exploring the intended–perceived gaps

The focal construct of this study is the gaps between intended and perceived HR practices. Calculated as a difference between intended and perceived HR practices, the raw score of the gap could have a positive sign, indicating that our respondents underestimate HR practices compared with the HR director; and a negative sign, indicating that the respondents overestimate these practices. The first scenario means that our respondents perceive that a specific practice is used to a lesser extent than the HR director intended whereas the latter scenario means that they perceive that a practice is used to a greater extent than the HR director planned. Considering the lack of larger-scale empirical evidence on the gaps between intended and perceived HR practices, it is interesting to take a closer look at the descriptive statistics of these variables and contrast them between line managers and employees (see Table 2).

Table 2 suggests that for both opportunity-enhancing HR practices and for rewards and training, the predominant share of our respondents think that these practices are used to a lesser extent than the HR director intended. Some of these underestimations are quite dramatic, with scores of 4.5 or 5 on a six-point Likert scale, indicating that some respondents perceive a particular HR practice as being virtually non-existent, while the HR director intended it to be widely used. For those few respondents who overestimate these practices, these overestimations are relatively small (with maximums of either 0.5 or 0.67) and could be interpreted as a measurement error. The situation is

different with job autonomy. First, respondents in our sample mostly perceive that they have higher autonomy than their HR director intends them to have, that is, they overestimate this HR practice. Interestingly, this trend is particularly pronounced among line managers. Second, while the range of disagreement is lower for this practice (with the maximum gap being 2.5), both overestimation and underestimation gaps appear to be high enough that they cannot be discarded as merely a measurement error. In other words, these findings indicate that the gaps between intended and perceived HR practices may have a different direction: Respondents may both underestimate (as in the case of training or mentorship) and overestimate (as in the case of autonomy) HR practices.

The share of respondents that underestimate HR practices is higher in the employees' subgroup than in the line managers' subgroup for all the practices in our study. The means and standard deviations vary between these groups, but not in a uniform way. The mean for four out of five of the HR practices we explored (except for autonomy) is higher for employees than for line managers. The variation in the gaps is lower within the line managers' group—or very close to those in the employees' group, except for training, where line managers have higher within-group variation.

Magnitude of the gaps between intended and perceived HR practices for line managers and employees

To explore the magnitude of the gaps, we transformed the values of the gaps into absolute values so that the

TABLE 2 Descriptive statistics of the gaps between intended and perceived HR practices (raw scores)

Gaps between intended and perceived HR practices							Respondents with the ...		
							absolute <i>N</i> (% in the sample)		
Group of HR practices	Operationalization	Position	Min	Max	Mean	Std. dev	Overestimation gap	No gap	Underestimation gap
Ability-enhancing	Training	line managers	−0.67	4.33	2.01	1.43	4 (5.8%)	1 (1.4%)	64 (92.8%)
		employees	−0.33	4.33	2.49	1.26	1 (0.8%)	2 (1.6%)	126 (97.7%)
Motivation-enhancing	Rewards	line managers	−0.67	3.67	1.63	1.07	4 (5.8%)	3 (4.3%)	62 (89.9%)
		employees	−0.33	3.67	1.94	1.05	10 (7.8%)	0	119 (92.2%)
	Autonomy	line managers	−2.50	1.00	−1.32	0.91	61 (88.4%)	1 (1.4%)	7 (10.1%)
		employees	−2.50	1.50	−0.90	1.03	91 (70.5%)	22 (17.1%)	16 (12.4%)
Opportunity-enhancing	Meetings	line managers	−0.50	3.83	1.13	0.99	6 (8.7%)	2 (2.9%)	61 (91.3%)
		employees	−0.25	4.50	1.66	1.03	1 (0.8%)	8 (6.2%)	120 (93%)
	Mentorship	line managers	0.00	4.0	1.28	1.01	0	15 (21.7%)	53 (76.8%)
		employees	0.00	5.00	1.75	1.35	0	16 (12.4%)	113 (87.6%)

higher the value, the higher the discrepancy. As we had discovered that the gaps could be both under- and over-estimations of HR intentions, the means for the raw scores mask the scope of the variation between intended and perceived HR practices. Therefore, the means of the magnitudes of the gaps provide a better insight into the discrepancy between HR intentions and respondents' perceptions. To explore the differences in magnitude of perceived gaps between line managers and employees, we used either the usual one-way ANOVA or the Welch ANOVA if the homogeneity of variances was violated. Table 3 presents the means for the magnitude of each of the five gaps, as well as for task interdependence as a key control variable and knowledge-sharing behaviour for line managers and employees.

We found statistically significant differences between the two groups in the magnitude of the gaps for all practices. These results indicate that employees experience a higher magnitude of gaps between intended and perceived practices for training, rewards and both opportunity-enhancing practices, and lower gaps for job autonomy.

Bearing in mind that our focal units had two levels of line management, we ran a robustness check, considering the department managers and senior specialists separately and contrasting them with employees. The one-way ANOVA indicates that there are statistically significant differences among the three subgroups of respondents. Both Tamhane's T2 and Games-Howell post hoc tests (Moder, 2010) revealed that the magnitudes of the gaps between intended and perceived HR practices were statistically significantly higher among employees than among department managers and senior specialists for meetings and mentorship and lower for job autonomy (at ρ varying between 0.004 and 0.047).

At the same time, there were no statistically significant differences between department managers and senior specialists across all gaps (at ρ varying between 0.280 and 0.993). These results confirm that it was appropriate to consider both groups of line managers together in our analysis.

Exploring the effects of the magnitude of gaps on knowledge-sharing behaviour: Comparison between different hierarchical levels

To explore if the magnitudes of the intended-perceived gaps in HR practices aimed at promoting knowledge sharing have an influence on knowledge-sharing behaviour, we used partial least squares structural equation modelling (PLS-SEM) with a consistent partial least squares algorithm. We chose PLS-SEM because it allows both formative and reflective constructs to be incorporated and is best suited to exploratory studies (Dijkstra & Henseler, 2015; Hair et al., 2017). It has also been recommended as particularly suitable for analysing HRM effects (Hauff, 2021). To test the strength of the relationships between constructs, we employed a bootstrapping technique, namely, a 5000 subsample bias corrected and accelerated bootstrap (Hair et al., 2017). To compare these effects between employees and line managers, we carried out multi-group analysis (MGA), using the PLS-MGA procedure (Hair et al., 2017). Table 4 presents the means, standard deviations, as well as pairwise correlations for all variables included in the model, and the results of the PLS-SEM analysis are summarized in Table 5. As the group of line managers is relatively small ($N = 69$), these results should be interpreted with some caution.

TABLE 3 Comparison of the magnitudes of the gaps between line managers and employees

Group characteristics		Group means		Comparison statistics between employees and line managers	
		Employees	Line managers	F Welch's <i>F</i>	ρ
Magnitude of gaps between intended and perceived HR practices in ...					
Ability-enhancing	Training	2.49	2.08	$F(1,196) = 4.63$.033
Motivation-enhancing	Rewards	1.99	1.68	$F(1,196) = 4.73$.031
	Autonomy	1.09	1.45	Welch's $F(1,163.231) = 10.80$.001
Opportunity-enhancing	Meetings	1.50	1.02	$F(1,196) = 12.57$.000
	Mentorship	1.75	1.28	Welch's $F(1,171.803) = 7.55$.007
Control variable					
	Task interdependence	3.75	4.53	$F(1,196) = 31.42$.000
Outcome variable					
	Knowledge-sharing behaviour	3.54	4.16	$F(1,196) = 17.33$.000
Group size (N)		$N = 129$	$N = 69$		

TABLE 4 Descriptive statistics and correlations between variables

No.	Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Knowledge-sharing behaviour	3.76	1.04													
2	Magnitude of gap in training	2.35	1.29	-0.31**												
3	Magnitude of gap in rewards	1.88	0.97	-0.19**	0.32**											
4	Magnitude of gap in autonomy	1.21	0.80	0.26**	0.05	-0.02										
5	Magnitude of gap in meetings	1.34	0.94	-0.44**	0.45**	0.43**	-0.23**									
6	Magnitude of gap in mentorship	1.59	1.26	-0.35**	0.16*	0.26**	-0.10	0.34**								
7	Task interdependence	4.02	1.00	0.40**	-0.26**	-0.13	0.16*	-0.34**	-0.29**							
8	Gender	0.70	0.46	0.17*	-0.14	-0.06	0.13	-0.11	-0.03	0.10						
9	Age	4.88	1.67	0.10	-0.015	0.12	0.01	-0.06	-0.03	0.21**	-0.08					
10	Education	3.93	0.62	0.16*	-0.018	-0.04	0.10	-0.19**	-0.13	0.18*	0.02	0.00				
11	Work experience	4.36	1.79	0.12	-0.047	0.14*	0.05	-0.13	-0.07	0.26**	-0.08	0.90**	0.01			
12	Tenure	3.93	1.90	0.15*	0.023	0.15*	0.04	-0.09	-0.19**	0.22**	-0.03	0.86**	-0.02	0.91**		
13	Position ^a	1.53	0.78	0.28**	-0.16*	-0.16*	0.19**	-0.23**	-0.20**	0.35**	0.19**	0.39**	0.23**	0.41**	0.46**	
14	Department	n/a	n/a	0.04	0.06	0.07	-0.13	0.05	-0.25**	0.07	-0.12	-0.06	0.04	-0.07	-0.00	0.01

^aPosition was coded as follows: '1'—specialists; '2'—senior specialists; and '3'—department managers.

** $p < 0.01$.

* $p < 0.05$ level (two-tailed test).

Table 5 suggests that knowledge-sharing behaviour among employees is negatively influenced by the magnitude of the gaps in both of the opportunity-enhancing HR practices – meetings and mentorship. Knowledge-sharing behaviour among line managers is mainly driven by task interdependence, as well as by the magnitude of the gaps in autonomy (positively) and training (negatively). There are statistically significant differences between the two groups of respondents in the effects of task interdependence and the magnitude of the gap in mentorship (at $\rho < 0.05$). At the same time, the effects of the magnitude of the gaps in autonomy and training are different, with $\rho = 0.052$ and 0.053 , respectively. These are a bit below the conservative threshold of 0.05 , but taking into account the limited sample size, they can be considered as indications of potential differences. Additionally, we looked at the variance in knowledge sharing explained within each of the groups. Model 0 (with controls only) explains 9.4% of the variance for employees, and 47.4% for line managers while Model 1 (with the magnitude of the gaps) explains 25% and 55.5%, respectively. In other words, the magnitude of the gaps in HR practices explains 15.6% of the variance (beyond control variables) in the knowledge-sharing behaviour of employees, and only 8% for line managers. Taken together, these findings suggest that altogether the magnitude of the gaps has a lesser impact on the knowledge-sharing behaviour of line managers, but their individual effects are not uniformly smaller.

DISCUSSION AND IMPLICATIONS

Our study quantitatively explored the gaps between intended and perceived HR practices among line managers and employees, and the relevance of these gaps to their knowledge-sharing behaviour, adding to the scant

empirical evidence on the subject. Indeed, most previous empirical studies on the gaps in HR practices used qualitative approaches by interviewing HR managers and/or employees (Makhecha et al., 2016; Piening et al., 2014) and did not directly explore the effects of the gaps on employee behaviours (with exception of Khilji & Wang, 2006). Together, our findings move us closer to a better understanding of the nature and the effects of the intended–perceived HRM gaps on employee knowledge-sharing behaviours. Hoping to lay the foundations for future theorizing and further empirical research on this phenomenon of high practical relevance, in the following sections we discuss the implications of our findings for research both on the HRM implementation process and on HRM for knowledge sharing, as well as the implications for practice. Our ideas are summarized in Table 6.

The nature of intended–perceived HR gaps

Our findings challenge the typical assumption in the extant literature that intended–perceived HR gaps are negative in sign (i.e., represent an underestimation of a practice) (e.g., Khilji & Wang, 2006), as they indicate that they could be also positive in sign (i.e., be an overestimation of a practice). Therefore, future theorizing on HRM gaps should incorporate the direction and the magnitude of a gap as two distinct dimensions, and empirical studies need to include them as separate variables. This would allow future research to explore the determinants of the sign of the gaps and whether these are different from the factors that drive their magnitude, as the limited extant literature has mostly explored the latter. It would also be useful to explore how these two dimensions of the gap are connected, for example, whether underestimation is usually higher in magnitude than overestimation, as it was in our dataset. Finally, if

TABLE 5 Comparison of the effects of the magnitude of gaps between two groups of respondents

Model paths:	Employees		Line managers		Intergroup comparison (PLS-MGA)		
	Path coefficient	ρ	Path coefficient	ρ	Difference in path coefficients	ρ	$1 - \rho^a$
Independent variables							
Controls							
Task interdependence	0.09	0.344	0.47	0.000	0.38	0.994	0.006
<i>Magnitude of gaps between intended and perceived HR practices in ...</i>							
Training	−0.08	0.350	−0.32	0.005	0.24	0.053	0.947
Rewards	0.07	0.465	−0.08	0.477	0.15	0.156	0.844
Autonomy	0.12	0.180	0.31	0.000	0.19	0.948	0.052
Meetings	−0.24	0.018	−0.07	0.675	0.18	0.827	0.173
Mentorship	−0.30	0.005	0.04	0.692	0.34	0.987	0.013

^aPLS-MGA is a one-sided test; therefore, $1 - \rho$ was calculated as well.

TABLE 6 Discoveries and implications of our study

What research suggests	What our findings indicate	Implications for theorizing	Implications for methodology	Questions for future research
Gaps are typically underestimation	Gaps differ in their 'sign', can be both underestimation and overestimation	Incorporate the direction and the magnitude of a gap as two distinct dimensions of the gap	Operationalize the direction and the magnitude of a gap as separate variables	What are the determinants of the sign of the gaps? Are they different from the determinants of their magnitude? How are these two dimensions connected? What are the effects of these two dimensions on employee behaviours and performance?
Gaps are considered at the aggregated HRM system level	Gaps vary between different HR practices	Theorize on gaps in different HR practices as potentially distinct	Do not use an aggregated HRM system index, explore the gaps for different HR practices separately	What are the determinants of the gaps for different HR practices? Why are the gaps different between different practices?
Gaps are detrimental	Gaps can have negative, positive and no effect Gaps can have different effects on different groups of employees	Theorize on gaps as value-destroying, value-neutral and value-enhancing Theorize on gaps for different groups as potentially distinct	Analyse gaps separately for different groups of respondents	What are the boundary conditions that influence the effect of the gaps on employee behaviours? What are the reasons for different effects of the gaps on different groups?
Line managers as implementers or active agents	Line managers are also (and first of all) recipients (perceivers)	Include HRM perceptions of line managers as a distinct element in HRM implementation chain	Measure gaps separately for line managers	What are the antecedents of the intended–perceived gaps for line managers? What are the effects of intended–perceived gaps of line managers on their own behaviours, and on the behaviours of their employees?

these two dimensions of the gaps are distinct, it would be important to explore whether they have similar or different effects on employee behaviours and performance.

Our findings also demonstrate that the gaps vary between different HR practices both in their magnitude and in their direction (sign). This observation suggests that the dominant approach in the extant literature, which is to aggregate different HR practices into an overall HRM system index (e.g., Den Hartog et al., 2013; Piening et al., 2014) and hence to aggregate the gaps at the HRM system level as well, is likely to mask the significant variation that could exist within such a system (Makhecha et al., 2016). Such an approach might be particularly problematic when studying knowledge sharing, as some of the recent evidence demonstrates that different HR practices aimed at promoting knowledge behaviours may conflict with each other (e.g., Andreeva et al., 2017) and thus that the aggregation may also mask the potentially controversial effects of the gaps on knowledge sharing.

Beyond the clear methodological implication for future research of measuring the gaps separately for different HR practices, our findings also raise some questions for future research. Indeed, it would be interesting to explore why the gaps may vary so much between different HR practices. For example, some of these differences could be related to the nature of the HR practices in question. In our dataset, it was job autonomy that particularly differed from other HR practices in both the sign and the magnitude of the intended–perceived gap. This difference could be explained by the nature of job autonomy: This aspect of job design is difficult for the HR department to standardize and control centrally and depends strongly on the discretion of a particular line manager. Alternatively, the gaps in different HR practices might be due to the design of these practices—for example, in line with the findings of Lopez-Cotarelo (2018) that indicate that different HRM practices may be designed to allow different levels of managerial discretion and that line managers could be allowed to choose the

options that fit best their local context—but this could apply to some HR practices and not to the others. In sum, we would benefit from a better understanding of why different HR practices might be subject to intended–perceived gaps to a different extent.

The role of line managers

Our findings draw attention to the *multifaceted role* of line managers in the HRM implementation process—in addition to their role as implementers or active adapters of HR practices, line managers are first recipients of these practices. As this ‘perceiver’ role precedes their further actions, it is likely to shape them. By neglecting this aspect, prior research has implied that line managers are always fully aware of intended HR practices and has interpreted any deviations from these by line managers as active agency on their part. Our findings indicate that this may not always be the case and that the intended–implemented gap can also occur because line managers were not (fully) aware of HRM intentions—in other words, shifting some of the blame for the gaps away from line managers’ shoulders (Guest et al., 2021).

Interestingly, the extant literature typically implies that line managers are positioned closer to the source of the signal in the chain of signalling organizational expectations and promises through HRM (Guest et al., 2021; Purcell & Hutchinson, 2007). Line managers, it is implied, receive special attention from the HR department in communications and training on HR policies and have an opportunity to connect with the HR department to clarify HR plans if they have any questions (Kim et al., 2018; Lopez-Cotarelo, 2018). All this implies that line managers are better informed of HRM intentions—that is, they should show a lower discrepancy between intended and perceived HR practices, as well as smaller within-group variance in perceptions of HR practices than employees (van Rossenberg, 2021). Contrary to these assumptions, our findings suggest that neither the magnitudes of the gaps in HR practices nor their within-group variance are uniformly lower for line managers than for employees. In our study, line managers experienced higher gaps between intended and perceived practices for job autonomy, and higher within-group variance for training.

The idea of the multifaceted role of line managers in HRM implementation that includes (or rather, starts with) their role as recipients of HRM intentions has important implications for future theorizing on the HRM implementation process, as it indicates that theories and models that aim to explain the HRM implementation chain need to include line managers’ perceptions of HRM intentions as one of the elements in the chain. To this end, our study concurs with van

Rossenberg (2021) and offers (for the first time, to the best of our knowledge) empirical evidence to support her idea that line managers’ perceptions of HR practice should be included in this consideration. Future research should explore the predictors of line managers’ perceptions of HRM intentions, as well as line managers’ reactions when their perceptions do not match the intended HR practices, and how these reactions spill over to their subordinates.

This finding has important practical implications for those organizations that would like to minimize the intended–perceived gap. Our findings suggest that to achieve this goal, organizations could start by focusing on minimizing the intended–perceived gap for their line managers. This group is always a smaller one than the overall employee population and typically closer to the HR department in terms of task-related connections and communications. Thus, it will be easier for HR managers to reach them to communicate their HRM intentions clearly and consistently. By bridging the intended–perceived gap for line managers, organizations can both positively impact line managers’ behaviours at work, which often serve as a role model to their subordinates, and ensure that the implementation of HR practices is more closely aligned with organizational intentions.

The effects of intended–perceived HR gaps

Previous research predominantly suggests that the gaps between intended and perceived HR practices have a damaging effect on individual and organizational outcomes (Khilji & Wang, 2006; Nishii et al., 2008; Pak & Kim, 2018; Piening et al., 2014). Our study paints a much more complex picture: the magnitude of the gaps may have different effects on knowledge-sharing behaviour, ranging from negative to no effect to a positive one. This evidence confirms the proposition of Makhecha et al. (2016) that these gaps could be value-destroying, value-neutral and value-enhancing. Furthermore, we found that the effects of the gaps also vary greatly between line managers and employees: The only similarity these two groups share is that the magnitude of the gap in extrinsic-motivation-enhancing HR practices has no impact on their knowledge-sharing behaviour.

This discovery raises a range of questions for future research. For example, what are the boundary conditions that influence the effect of the gaps on employee behaviours? In other words, why do some gaps have a negative effect, while others have no effect or a positive one? For example, in our dataset, the only positive effect comes from the magnitude of the gap in autonomy—and at the same time, it is also the only HR practice in our study that is predominantly characterized by an overestimation of the usage of this

practice by respondents. Does this indicate that overestimation gaps tend to have positive effects? Or that the positive effect of this gap is related to the fact that autonomy is the core predictor of knowledge sharing (Andreeva & Sergeeva, 2016), and hence respondents perceived it so positively? Another example from our study is the gap in rewards—its magnitude has no effect on knowledge sharing for both groups of our respondents. Why is that so? On the one hand, earlier research has suggested that knowledge sharing, being an extra-role behaviour, is mainly driven by intrinsic motivation, and therefore, that HR practices aimed at enhancing extrinsic motivation would have no effect on this type of behaviour (e.g., Andreeva & Sergeeva, 2016; Liu & Liu, 2011). Hence, one could suggest that the lack of relevance of the particular HR practices for stimulating a certain behaviour may make employees insensitive to the gap in this practice as well. On the other hand, other research suggests that unmet expectations could be detrimental irrespectively of whether the real practice is below or above expectations (Wong & Kuvaas, 2018), and hence, one could also suggest that the gaps in HR practices could be detrimental even if they represent an overestimation of the practice.

An alternative explanation for the differentiated effects of the magnitude of gaps could be related to the reason why these gaps arose. For example, according to the concept of HRM system strength, intended–perceived HRM gaps can exist due to an incongruence or inconsistency in HR messages or due to the lack of visibility of HR practices (Bowen & Ostroff, 2004). It is possible that for HR practices that lack visibility, the gaps may not have any impact on employee behaviours because there were no expectations formed and thus no trust breached. Makhecha et al. (2016) identified five types of the gaps in their study, which they labelled gaps of omission, gaps of commission, gaps of initiation, gaps of non-realization and gaps of non-experience. Along similar lines, one could suggest that the effects of the gaps may depend on their type. In sum, further research is needed to explore these issues.

Another important question to explore is why the gaps have such a different effect on different groups of respondents. Though due to the line managers' sample size in our dataset, our findings in this regard are to be interpreted with caution; they demonstrate that this question is worthy of further investigation. For example, the magnitude of the gap in mentorship (HR practice that is intended to provide opportunities for knowledge sharing) has a negative effect on employees' knowledge-sharing behaviour, but it does not have any effect on line managers. Conversely, the magnitudes of the gaps in training and in autonomy have an effect on line managers' knowledge sharing but not on that of employees. This could be explained by the different needs and expectations respondents might have at the different levels of the organizational hierarchy.

Limitations

Although we believe that this study offers useful insights into how knowledge sharing in organizations is impacted by the HRM implementation process, we are aware of its shortcomings—which also point to some additional future research directions. First, focusing on one organization for the empirical data collection and thus having intended HR practices as constant for all respondents did not allow us to use a polynomial regression for gaps analysis as suggested by Edwards (2001) and thus to compare directly the effects of (a) perceived HR practices and (b) gaps between intended and perceived practices and explore the potential interaction between them. Empirical investigations of how these variables work together to explain individual behaviour would be valuable to further understand the joint effects of HRM content and the HRM implementation process.

Second, the respondents' anonymity as a methodological principle of data collection limited our ability to make direct comparisons between the perceptions of employees and their immediate supervisors. It would be interesting to explore how line managers' perceptions of gaps in HR practices are related to perceptions of relevant gaps among their subordinates.

Third, the group of line managers in our dataset was quite small, especially when compared with the group of employees. This limited the power of our intergroup comparison and our capacity to identify more nuanced differences between the two groups. Future research would benefit from further exploration of how and why line managers and employees react to gaps between intended and perceived HR practices, using bigger samples of both groups.

Fourth, our data did not evidence whether the gaps we identified existed due to a lack of consensus and consistency or due to a lack of distinctiveness (as defined by Bowen & Ostroff, 2004). In future studies, it would be valuable to test whether the gaps have different effects depending on the reason for which they exist.

CONCLUSIONS

This exploratory study aimed to understand what the gaps between intended and perceived HR practices—as a core aspect of the HRM implementation process—look like for line managers and employees, and how they influence their knowledge-sharing behaviours. By observing that these gaps can be multidirectional, differ in their magnitude between line managers and employees, and have varied effects on knowledge-sharing behaviours, we challenge some of the assumptions in the existing literature and hence pave the way for future research on HRM for managing knowledge and HRM implementation in general to further enhance our understanding of these topics.

AUTHOR CONTRIBUTIONS

Tatiana Andreeva: Conceptualization (lead); methodology (lead); formal analysis; writing—original draft preparation (lead); writing—review & editing (lead). **Veronika Kabalina:** Conceptualization; methodology; data collection; writing—original draft preparation; writing—review & editing. **Maral Muratbekova-Touron:** Conceptualization; methodology; writing—original draft preparation; writing—review & editing.

ACKNOWLEDGEMENTS

First, we would like to thank the case firm, Professors Olga Podverbnikh and Ulyana Podverbnikh for their assistance in data collection for this study. Second, we would like to express our gratitude to Professors Anne-Wil Harzing, Argyro Avgoustaki, Jordi Trullen and Olga Ryazanova for their valuable feedback on the earlier versions of this paper. We are also grateful for the comments received at the CYGNA (Supporting Women in Academia Network) Writing Bootcamp in 2019 in Middlesex University (UK). Finally, we thank the anonymous reviewers and Professor Michael Morley (Editor-in-Chief) for their insightful and constructive comments that helped to improve this paper. Open access funding provided by IReL.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Tatiana Andreeva  <https://orcid.org/0000-0002-4045-7254>

Maral Muratbekova-Touron  <https://orcid.org/0000-0003-0366-258X>

REFERENCES

- Alfes, K., Truss, C., Soane, E.C., Rees, C. & Gatenby, M. (2013) The relationship between line manager behavior, perceived HRM practices, and individual performance: examining the mediating role of engagement. *Human Resource Management*, 52(6), 839–859. Available from: <https://doi.org/10.1002/hrm.21512>
- Alfes, K., Veld, M. & Fürstenberg, N. (2021) The relationship between perceived high-performance work systems, combinations of human resource well-being and human resource performance attributions and engagement. *Human Resource Management Journal*, 31(3), 729–752. Available from: <https://doi.org/10.1111/1748-8583.12310>
- Alvesson, M. & Kärreman, D. (2007) Unraveling HRM: identity, ceremony, and control in a management consulting firm. *Organization Science*, 18(4), 711–723. Available from: <https://doi.org/10.1287/orsc.1070.0267>
- Andreeva, T. & Sergeeva, A. (2016) The more the better ... or is it? The contradictory effects of HR practices on knowledge-sharing motivation and behaviour. *Human Resource Management Journal*, 26(2), 151–171. Available from: <https://doi.org/10.1111/1748-8583.12100>
- Andreeva, T., Vanhala, M., Sergeeva, A., Ritala, P. & Kianto, A. (2017) When the fit between HR practices backfires: exploring the interaction effects between rewards for and appraisal of knowledge behaviours on innovation. *Human Resource Management Journal*, 27(2), 209–227. Available from: <https://doi.org/10.1111/1748-8583.12133>
- Argote, L. & Ingram, P. (2000) Knowledge transfer: a basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82(1), 150–169. Available from: <https://doi.org/10.1006/obhd.2000.2893>
- Bamberger, P.A. & Ang, S. (2016) The quantitative discovery: what is it and how to get it published. *Academy of Management Discoveries*, 2(1), 1–6. Available from: <https://doi.org/10.5465/amd.2015.0060>
- Beijer, S., Peccei, R., Van Veldhoven, M. & Paauwe, J. (2019) The turn to employees in the measurement of human resource practices: a critical review and proposed way forward. *Human Resource Management Journal*, 31(1), 1–17.
- Bello-Pintado, A. (2015) Bundles of HRM practices and performance: empirical evidence from a Latin American context. *Human Resource Management Journal*, 25(3), 311–330. Available from: <https://doi.org/10.1111/1748-8583.12067>
- Bos-Nehles, A., Trullen, J. & Valverde, M. (2021) HRM system strength implementation: a multi-actor process perspective. In: Sanders, K., Jang, H. & Patel, C. (Eds.) *Handbook on HR process research*. Cheltenham, UK: Edward Elgar Publishing Limited, pp. 99–114.
- Bos-Nehles, A.C. & Meijerink, J.G. (2018) HRM implementation by multiple HRM actors: a social exchange perspective. *International Journal of Human Resource Management*, 29(22), 3068–3092.
- Bowen, D.E. & Ostroff, C. (2004) Understanding HRM-firm performance linkages: the role of the “strength” of the HRM system. *The Academy of Management Review*, 29(2), 203–221.
- Cabrera, A. & Cabrera, E.F. (2002) Knowledge-sharing dilemmas. *Organization Studies*, 23(5), 687–710. Available from: <https://doi.org/10.1177/0170840602235001>
- Cao, M., Zhao, S. & Xu, Y. (2022) How HR systems are implemented matters: high-performance work systems and employees’ thriving at work. *Asia Pacific Journal of Human Resources*, 60, 880–899. Available from: <https://doi.org/10.1111/1744-7941.12307>
- Carmeli, A., Gelbard, R. & Reiter-Palmon, R. (2013) Leadership, creative problem-solving capacity, and creative performance: The importance of knowledge sharing. *Human Resource Management*, 52, 95–121. Available from: <https://doi.org/10.1002/hrm.21514>
- Chuang, C.-H., Jiang, Y. & Jackson, S.E. (2016) Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management*, 42(2), 524–554.
- Delery, J.E. (1998) Issues of fit in strategic human resource management: implications for research. *Human Resource Management Review*, 8(3), 298–309.
- Den Hartog, D.N., Boon, C., Verburg, R.M. & Croon, M.A. (2013) HRM, communication, satisfaction, and perceived performance: a cross-level test. *Journal of Management*, 39(6), 1637–1665. Available from: <https://doi.org/10.1177/0149206312440118>
- Dijkstra, T.K. & Henseler, J. (2015) Consistent partial least squares path modelling. *MIS Quarterly*, 29(2), 297–316.
- Donnelly, R. (2019) Aligning knowledge sharing interventions with the promotion of firm success: the need for SHRM to balance tensions and challenges. *Journal of Business Research*, 94, 344–352. Available from: <https://doi.org/10.1016/j.jbusres.2018.02.007>
- Edwards, J.R. (2001) Ten difference score myths. *Organizational Research Methods*, 4, 264–286.
- Foss, N. (2007) The emerging knowledge governance approach: challenges and characteristics. *Organization*, 14(1), 29–52. Available from: <https://doi.org/10.1177/1350508407071859>
- Foss, N. (2009) Alternative research strategies in the knowledge movement: from macro bias to micro-foundations and multi-level

- explanation. *European Management Review*, 6(1), 16–28. Available from: <https://doi.org/10.1057/emr.2009.2>
- Foss, N.J., Minbaeva, D.B., Pedersen, T. & Reinholt, M. (2009) Encouraging knowledge sharing among employees: How job design matters. *Human Resource Management*, 48(6), 871–893. Available from: <https://doi.org/10.1002/hrm.20320>
- Fu, N., Flood, P.C., Rousseau, D.M. & Morris, T. (2020) Line managers as paradox navigators in HRM implementation: balancing consistency and individual responsiveness. *Journal of Management*, 46(2), 203–233. Available from: <https://doi.org/10.1177/0149206318785241>
- Gagné, M. (2009) A model of knowledge-sharing motivation. *Human Resource Management*, 48(4), 571–589.
- Good, J.R.L., Halinski, M. & Boekhorst, J.A. (2022) Organizational social activities and knowledge management behaviors: an affective events perspective. *Human Resource Management*, 1–15. Available from: <https://doi.org/10.1002/hrm.22109>
- Graebner, M.E., Knott, A.M., Lieberman, M.B. & Mitchell, W. (2022) Empirical inquiry without hypotheses: a question-driven, phenomenon-based approach to strategic management research. *Strategic Management Journal*, 1–8. Available from: <https://doi.org/10.1002/smj.3393>
- Guest, D.E., Sanders, K., Rodrigues, R. & Oliveira, T. (2021) Signalling theory as a framework for analysing human resource management processes and integrating human resource attribution theories: a conceptual analysis and empirical exploration. *Human Resource Management Journal*, 31(3), 796–818. Available from: <https://doi.org/10.1111/1748-8583.12326>
- Hair, J.F., Hult, G.T., Ringle, C.M. & Sarstedt, M. (2017) *A primer on partial least squares structural equation modeling (PLS-SEM)*. Los Angeles: Sage.
- Hauff, S. (2021) Analytical strategies in HRM systems research: a comparative analysis and some recommendations. *The International Journal of Human Resource Management*, 32(9), 1923–1952. Available from: <https://doi.org/10.1080/09585192.2018.1547779>
- Hewett, R., Shantz, A., Mundy, J. & Alfes, K. (2018) Attribution theories in human resource management research: a review and research agenda. *International Journal of Human Resource Management*, 29(1), 87–126.
- Hsu, M.H., Ju, T.L., Yen, C.H. & Chang, C.M. (2007) Knowledge sharing behavior in virtual communities: the relationship between trust, self-efficacy, and outcome expectations. *International Journal of Human-Computer Studies*, 65(2), 153–169. Available from: <https://doi.org/10.1016/j.ijhcs.2006.09.003>
- Hu, B., McCune, S.A., Mao, Y. & Yan, A. (2022) The influence of human resource management systems on employee job crafting: an integrated content and process approach. *Human Resource Management Journal*, 32(1), 117–132. Available from: <https://doi.org/10.1111/1748-8583.12392>
- Jackson, S.E., Chuang, C.-H., Harden, E.E. & Jiang, Y. (2006) Toward developing human resource management systems for knowledge-intensive teamwork. In: Martocchio, J.J. (Ed.) *Research in personnel and human resources management*. Bingley: Emerald Group Publishing.
- Jiang, K., Hu, J., Liu, S. & Lepak, D.P. (2017) Understanding employees' perceptions of human resource practices: effects of demographic dissimilarity to managers and coworkers. *Human Resource Management*, 56(1), 69–91. Available from: <https://doi.org/10.1002/hrm.21771>
- Jiang, K., Lepak, D.P., Han, K., Hong, Y., Kim, A. & Winkler, A.-L. (2012) Clarifying the construct of human resource systems: Relating human resource management to employee performance. *Human Resource Management Review*, 22(2), 73–85. Available from: <https://doi.org/10.1016/j.hrmr.2011.11.005>
- Jiang, K., Lepak, D.P., Hu, J. & Baer, J.C. (2012) How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264–1294. Available from: <https://doi.org/10.5465/amj.2011.0088>
- Katou, A.A., Budhwar, P.S. & Patel, C. (2014) Content vs. process in the HRM performance relationship: an empirical examination. *Human Resource Management*, 53(4), 527–544. Available from: <https://doi.org/10.1002/hrm.21606>
- Kehoe, R.R. & Han, J.H. (2020) An expanded conceptualization of line managers' involvement in human resource management. *Journal of Applied Psychology*, 105(2), 111–129. Available from: <https://doi.org/10.1037/apl0000426>
- Kehoe, R.R. & Wright, P.M. (2013) The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of Management*, 39(2), 366–391. Available from: <https://doi.org/10.1177/0149206310365901>
- Khilji, S.E. & Wang, X. (2006) 'Intended' and 'implemented' HRM: the missing linchpin in strategic human resource management research. *International Journal of Human Resource Management*, 17, 1171–1189.
- Kim, S., Su, Z.X. & Wright, P.M. (2018) The “HR–line-connecting HRM system” and its effects on employee turnover. *Human Resource Management*, 57(5), 1219–1231. Available from: <https://doi.org/10.1002/hrm.21905>
- Lepak, D.P., Liao, H., Chung, Y. & Harden, E.E. (2006) A conceptual review of human resource management systems in strategic human resource management research. *Research in Personnel and Human Resources Management*, 25(1), 217–271. Available from: [https://doi.org/10.1016/S0742-7301\(06\)25006-0](https://doi.org/10.1016/S0742-7301(06)25006-0)
- Li, X. & Frenkel, S. (2017) Where hukou status matters: analyzing the linkage between supervisor perceptions of HR practices and employee work engagement. *International Journal of Human Resource Management*, 28(17), 2375–2402.
- Liao, H., Toya, K., Lepak, D.P. & Hong, Y. (2009) Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology*, 94(2), 371–391. Available from: <https://doi.org/10.1037/a0013504>
- Liu, N.-C. & Liu, M.-S. (2011) Human resource practices and individual knowledge-sharing behaviour—an empirical study for Taiwanese R&D professionals. *The International Journal of Human Resource Management*, 22(4), 981–997. Available from: <https://doi.org/10.1080/09585192.2011.555138>
- Lombardi, S., Cavaliere, V., Giustiniano, L. & Cipollini, F. (2020) What money cannot buy: The detrimental effect of rewards on knowledge sharing. *European Management Review*, 17(1), 153–170. Available from: <https://doi.org/10.1111/emre.12346>
- Lopez-Cotarelo, J. (2018) Line managers and HRM: a managerial discretion perspective. *Human Resource Management Journal*, 28(2), 255–271. Available from: <https://doi.org/10.1111/1748-8583.12176>
- Mabey, C. & Zhao, S. (2017) Managing five paradoxes of knowledge exchange in networked organizations: new priorities for HRM? *Human Resource Management Journal*, 27(1), 39–57. Available from: <https://doi.org/10.1111/1748-8583.12106>
- MacKenzie, S.B., Podsakoff, P.M. & Jarvis, C.B. (2005) The problem of measurement model misspecification in behavioral and organizational research and some recommended solutions. *Journal of Applied Psychology*, 90(4), 710–730. Available from: <https://doi.org/10.1037/0021-9010.90.4.710>
- Makhecha, U.P., Srinivasan, V., Prabhu, G.N. & Mukherji, S. (2016) Multi-level gaps: a study of intended, actual and experienced human resource practices in a hypermarket chain in India. *The International Journal of Human Resource Management*, 29(2), 360–398.
- Minbaeva, D. (2013) Strategic HRM in building micro-foundations of organizational knowledge-based performance. *Human Resource Management Review*, 23(4), 378–390. Available from: <https://doi.org/10.1016/j.hrmr.2012.10.001>
- Mirfakhhar, A.S., Trullen, J. & Valverde, M. (2018) Easier said than done: a review of antecedents influencing effective HR

- implementation. *The International Journal of Human Resource Management*, 29(22), 3001–3025. Available from: <https://doi.org/10.1080/09585192.2018.1443960>
- Moder, K. (2010) Alternatives to F-test in one-way ANOVA in case of heterogeneity of variances (a simulation study). *Psychological Test and Assessment Modelling*, 52(4), 343–353.
- Nifadkar, S.S., Wu, W. & Gu, Q. (2019) Supervisors' work-related and nonwork information sharing: Integrating research on information sharing, information seeking, and trust using self-disclosure theory. *Personnel Psychology*, 72, 241–269. Available from: <https://doi.org/10.1111/peps.12305>
- Nishii, L., Lepak, D. & Schneider, B. (2008) Employee attributions of the 'why' of HR practices: their effects on employee attitudes and behaviours, and customer satisfaction. *Personnel Psychology*, 61(3), 503–545. Available from: <https://doi.org/10.1111/j.1744-6570.2008.00121.x>
- Ostroff, C. & Bowen, D.E. (2016) Reflections on the 2014 decade award: is there strength in the construct of HR system strength? *Academy of Management Review*, 41(2), 196–214. Available from: <https://doi.org/10.5465/amr.2015.0323>
- Pak, J. & Kim, S. (2018) Team manager's implementation, high performance work systems intensity, and performance: a multilevel investigation. *Journal of Management*, 44(7), 2690–2715. Available from: <https://doi.org/10.1177/0149206316646829>
- Piening, E.P., Baluch, A. & Ridder, H.-G. (2014) Mind the intended–implemented gap: understanding employees' perceptions of HRM. *Human Resource Management*, 53(4), 545–567. Available from: <https://doi.org/10.1002/hrm.21605>
- Podsakoff, P.M., MacKenzie, S.B. & Podsakoff, N.P. (2012) Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569. Available from: <https://doi.org/10.1146/annurev-psych-120710-100452>
- Podsakoff, P.M. & Organ, D.W. (1986) Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 69–82.
- Purcell, J. & Hutchinson, S. (2007) Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource Management Journal*, 17(1), 3–20. Available from: <https://doi.org/10.1111/j.1748-8583.2007.00022.x>
- Sanders, K., Shipton, H. & Gomes, J. (2014) Is HR process important? Past, current and future challenges. *Human Resource Management*, 53(4), 489–503. Available from: <https://doi.org/10.1002/hrm.21644>
- Sikora, D.M. & Ferris, G.R. (2014) Strategic human resource practice implementation: the critical role of line management. *Human Resource Management Review*, 24(3), 271–281. Available from: <https://doi.org/10.1016/j.hrmr.2014.03.008>
- Srivastava, A., Bartol, K.M. & Locke, E.A. (2006) Empowering leadership in management teams: effects on knowledge sharing, efficacy, and performance. *Academy of Management Journal*, 49(6), 1239–1251. Available from: <https://doi.org/10.5465/amj.2006.23478718>
- Stavrou, E. & Ierodiakonou, C. (2016) Entitlement to work–life balance support: employee/manager perceptual discrepancies and their effect on outcomes. *Human Resource Management*, 55(5), 845–869. Available from: <https://doi.org/10.1002/hrm.21745>
- Trullen, J., Bos-Nehles, A. & Valverde, M. (2020) From intended to actual and beyond: a cross-disciplinary view of (human resource management) implementation. *International Journal of Management Reviews*, 22(2), 150–176. Available from: <https://doi.org/10.1111/ijmr.12220>
- Van Der Vegt, G., Emans, B. & Van De Vliert, E. (2000) Team members' affective responses to patterns of intragroup interdependence and job complexity. *Journal of Management*, 26(4), 633–655. Available from: <https://doi.org/10.1177/014920630002600403>
- van Mierlo, J., Bondarouk, T. & Sanders, K. (2018) The dynamic nature of HRM implementation: a structuration perspective. *The International Journal of Human Resource Management*, 29(22), 3026–3045. Available from: <https://doi.org/10.1080/09585192.2018.1443957>
- van Rossenberg, Y. (2021) Perceptions of HRM: When do we differ in perceptions? When is it meaningful to assess such differences? In: Sanders, K., Jang, H. & Patel, C. (Eds.) *Handbook on HR process research*. Cheltenham, UK: Edward Elgar Publishing Limited, pp. 47–69.
- Wang, Y., Kim, S., Rafferty, A. & Sanders, K. (2020) Employee perceptions of HR practices: a critical review and future directions. *The International Journal of Human Resource Management*, 31(1), 128–173. Available from: <https://doi.org/10.1080/09585192.2019.1674360>
- Wong, S.I. & Kuvaas, B. (2018) The empowerment expectation–perception gap: an examination of three alternative models. *Human Resource Management Journal*, 28(2), 272–287. Available from: <https://doi.org/10.1111/1748-8583.12177>
- Wright, P.M. & Nishii, L.H. (2007) Strategic HRM and organizational behavior: integrating multiple levels of analysis. CAHRS Working Paper #07–03, 1–24. Retrieved from <http://digitalcommons.ilr.cornell.edu/cahrswp/468>
- Wu, W.L., Hsu, B.F. & Yeh, R.S. (2007) Fostering the determinants of knowledge transfer: a team-level analysis. *Journal of Information Science*, 33(3), 326–339. Available from: <https://doi.org/10.1177/0165551506070733>

How to cite this article: Andreeva, T., Kabalina, V. & Muratbekova-Touron, M. (2022) Mind the gap: Intended versus perceived human resource practices and knowledge sharing of line managers and employees. *European Management Review*, 1–18. Available from: <https://doi.org/10.1111/emre.12545>

APPENDIX

Study constructs and measurement scales Reflective constructs

Knowledge-sharing behaviour (Hsu et al., 2007)

- I actively participate in knowledge-sharing activities in our company.
- When discussing a complicated issue, I am usually involved in the subsequent interactions.
- I usually spend a lot of time sharing knowledge with employees of our company.
- I participate in discussing all kinds of work-related questions, not only the questions directly related to my own job.
- Being a member of our organization, I usually actively share my knowledge with others.

Intrinsic-motivation-enhancing HR practices: autonomy (Foss et al., 2009)

To what extent is your job characterized by the following:

- The freedom to carry out my job the way I want to
- The opportunity for independent initiative
- High level of variety in my job*

Task interdependence (Van der Vegt et al., 2000)

- I have to obtain information and advice from my colleagues to complete my work.
- I depend on my colleagues for completion of my work.
- I have a one-person job, I rarely have to check or work with others*.
- I have to work closely with my colleagues to do my work properly.
- In order to complete their work, my colleagues have to obtain information and advice from me.

Formative constructs

Extrinsic-motivation-enhancing HR practices: rewards (Andreeva & Sergeeva, 2016)

- Our company specifically rewards knowledge sharing with monetary incentives.
- Our company specifically rewards knowledge sharing with non-monetary incentives.
- In our company, knowledge sharing is a component in employees' performance evaluation.
- Opportunity-enhancing HR practices: meetings (Wu et al., 2007).
- There are annual conferences or other meetings focused on certain topics that involve discussions among all company employees.
- Our company invites high-performance employees to share their knowledge with others in meetings.
- Our company invites employees who have just acquired new knowledge from outside sources to share what they have learned with others.

- Our company holds birthday parties, trips, and other get-together activities that promote friendship among colleagues.
- Our company holds regular meetings where colleagues can share successful experiences or resolve work problems*.
- Our company allows employees to consult their colleagues on problems during work time*.
- Our company has common spaces available where employees can talk to each other and share their experience*.

Opportunity-enhancing HR practices: mentoring (Wu et al., 2007)

- The company assigns every new employee a senior employee and coaching to help him/her during orientation.
- The company has mentoring programs in which employees can receive their mentor's help at any time.

Ability-enhancing HR practices: training (Andreeva & Sergeeva, 2016)

- Our company provides trainings to develop interpersonal communication skills.
- Our company provides trainings for teamwork skills.
- Our company provides trainings to develop skills of self-reflection and knowledge externalization.

*Items were excluded from the scales during assessment of quality of the measurement model.