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DOI:

[10.1111/1748-8583.12229](https://doi.org/10.1111/1748-8583.12229)

*Document Version*

Publisher's PDF, also known as Version of record

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

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*. <https://doi.org/10.1111/1748-8583.12229>

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# The turn to employees in the measurement of human resource practices: A critical review and proposed way forward

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## Abstract

Although initially studies examining human resource management (HRM)–outcome relationships only used management-based ratings of HR practices, arguments have been advanced in favour of using employee-based ratings. To examine this, a systematic analysis of HRM–outcome studies published between 2000 and 2017 is performed, which shows that over time studies have indeed increasingly made use of employees as respondents to measures of human resource (HR) practices. An in-depth analysis of these measures of perceived HR practices revealed that various problems and issues can be identified when critically reviewing these measures. It is observed that considerable idiosyncrasy exists in measures of perceived HR practices, coupled with a lack of transparency in how these measures are often reported in existing studies. Also, a mixture of evaluative and descriptive items creates concerns about jingle fallacies in extant research and in turn about the validity of HRM–outcome results. Recommendations are provided to further advance the measurement and conceptualisation of this core construct.

## KEYWORDS

appraisal, construct clarity, HR practices, pay, performance management, recruitment

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## 1 | INTRODUCTION

The human resource (HR) practices construct is central to the HR management (HRM) literature as a large number of studies focus on establishing a relationship between HR practices or systems of HR practices and various outcomes at both the individual and organisational levels. Determining the appropriate source for collecting information about and measuring HR practices, therefore, is a central issue in HRM research. For the large majority of survey-based research, this question essentially seems to boil down to a choice between using either management-based or employee-based ratings of HR practices (with important and valuable exceptions of studies including both types of reports, e.g., Takeuchi, Lepak, Wang, & Takeuchi, 2007; Den Hartog, Boon, Verburg, & Croon, 2013). Historically, early studies of the relationship between HRM and outcomes all made use of managerial reports of HR practices (e.g., Huselid, 1995; Ichniowski, Shaw, & Prennushi, 1997; MacDuffie, 1995). Over the past 20 years or so, however, a number of important arguments have been advanced in support of the use of employee ratings explicitly designed to measure what are commonly referred to in the literature as employee perceptions of HR practices or perceived HR practices for short (Allen, Shore, & Griffeth, 2003; Kehoe & Wright, 2013; Nishii & Wright, 2008; Purcell & Kinnie, 2007).

In principle, a move to using employee rather than managerial HR ratings, linked to the notion of perceived HR practices, represents a significant conceptual and methodological shift in HRM research and would, therefore, deserve close scrutiny and attention. In practice, however, we know little about the extent to which the arguments in favour of studying perceived HR practices have actually been taken up by researchers and whether there has indeed been an increase over time in studies focusing on employee rather than management reports of HR practices. In addition, to the extent that there has been a shift of this kind in HRM-outcomes research, we lack a clear understanding of the precise nature of the employee rated measures that are used. The present study seeks to address these gaps in our understanding of the potential shift that has taken place in the way in which the HR practices construct is measured and conceptualised in HRM research. Specifically, on the basis of a systematic analysis of all HRM-outcome studies published between 2000 and 2017 in 10 reputable US- and UK-based management and HRM journals, we have three main aims in this study. First is to map the development over time of the sources of data used to measure HR practices in order to determine the extent to which there has indeed been a shift away from management to employee ratings in survey-based HRM-outcome research. To the extent that such a shift has occurred and/or is occurring, our second aim is to examine in greater detail the nature of the measures that are used to assess the perceived HR practices construct with a view to identifying key conceptual and methodological problems involved in the current usage of employee ratings in HRM research. In doing so, we focus on key issues relating to the clarity and consistency of the way in which perceived HR practices are conceptualised and measured in extant research. In particular, we focus on the tendency to conflate factual versus more subjective and evaluative measures and underlying conceptualisations of the HR practices construct and on the implications that this has for the understanding of the HRM-outcomes relationship and ultimately, therefore, for the cumulation of knowledge in this area. Our third and final aim is to look ahead and identify key steps that can be taken to address some of the main problems and issues highlighted in our analysis relating to the operationalisation and conceptualisation of the perceived HR practices construct, including important lines of further research and investigation in this area.

In this context, it is important to emphasise that even though in this study we focus specifically on employee-based measures of HR practices, this should not be taken to mean that employee-based measures are necessarily to be preferred over managerial reports. The debate regarding the relative merits of employee versus managerial reports of HR practices (see, e.g., Delery & Shaw, 2001) is not our main focus of interest here. Also, we do not aim to argue that either employees or managers provide more accurate reports of HR practices and are thus more or less valuable respondents to HR practice items. Instead, the current research is designed to examine trends in the measurement of HR practices and to provide a novel analysis of the nature of employee-based measures of HR practices that have been used in extant research.

In sum, this study aims to contribute to the literature on the measurement of HR practices and, in particular, to the measurement and underlying conceptualisation of HR practices based on employee reports. The contribution of the study is threefold. First, based on a systematic review of extant studies, it provides greater insight into the potentially growing importance of employee as opposed to management ratings of HR practices in HRM-outcomes research. Second, it contributes to a better understanding of some of the key problems and issues related to the operationalisation and conceptualisation of the perceived HR practices construct by examining in detail the items used. And third, it highlights important implications of these issues for construct clarity and accumulation of knowledge and, in the process, outlines core recommendations about the use of employee measures of HR practices in future studies, while also directing attention to fruitful lines of further investigation in the area.

## 2 | BACKGROUND: THE USE OF EMPLOYEE-BASED MEASURES OF HR PRACTICES

The measurement of HR practices has been an important topic of debate in the HRM literature (e.g., Becker & Gerhart, 1996; Delery, 1998; Delery & Shaw, 2001; Kepes & Delery, 2007; Langevin-Heavey et al., 2013; Wright & Gardner, 2003). Issues such as the functional areas to be included in measures, the distinction between HR philosophies, HR policies, and HR practices, and the items to be included in measures have been extensively discussed. Questions about the source of data to be used for measures of HR practices have also received substantial attention, and various arguments have been advanced for focusing on employees as HR respondents. Early interventions in this area tended to focus on methodological issues. Particularly important in this respect are the studies by Gerhart, Wright, McMahan, and Snell (2000) and Huselid and Becker (2000) showing that single rater measures of HR practices suffer from unreliability. On statistical grounds, therefore, employee-based measures that typically involve multiple raters are often argued to be more reliable and, hence, preferable to management-based measures that typically rely on only a single rater. Moreover, conceptually and in terms of validity, the ability of a single (management) rater accurately to report on the HR practices used for often multiple groups across a whole organisation has also been questioned, thereby further reinforcing the case for using multiple (employee) raters rather than single (management) raters for measuring HR practices.

A second type of argument focuses on individual level variance in HR practices perceptions that can only be captured when making use of employee reports of such practices. Different authors attribute these differences in perceptions to different causes. One group of arguments links these different perceptions to different interpretations or understandings of HR practices by employees. Kehoe and Wright (2013), for example, argue that depending on their job role, employees differ in their experiences and interpretations of HR practices. It is also argued that because of different expectations and needs, employees may not perceive HR practices as the organisation has intended, hence necessitating employee-level measures of HR practices (Allen et al., 2003; Kehoe & Wright, 2013).

Another suggested source of variance is not linked to differences in interpretation between employees but rather to differences in implementation. Here, it is argued that implemented HR practices might differ from intended HR practices or HR policies because of, for example, differences in the way the practices are actually implemented at the workplace by first-line supervisors (Den Hartog et al., 2013; Wright, Gardner, Moynihan, & Allen, 2005). As a result, employees and managers differ in their reports of HR practices. These differences between intended, actual, and perceived HR practices are important for understanding the meaning and value of employee- and managerial-based measures of HR practices (Purcell & Kinnie, 2007). Differences that can occur between HR policies and HR practices due to differences in the implementation by first-line supervisors thus affect how managerial and employee reports are interrelated (Purcell & Hutchinson, 2007). Also, it is argued that HR practices might differ between employee groups (Kehoe & Wright, 2013; Wright et al., 2005). In the latter, case variance is thus due to the “real”

differences in the HR practices that are applied to different job groups and not due to the differences in individual interpretations.

Yet another type of argument is related to linking HR practices to outcomes. Kehoe and Wright (2013) argue that when linking HR practices to employee attitudes and behaviours, perceptions of employees are “temporally closer to, and consequently likely to be more predictive of, their attitudinal and behavioral outcomes than are HR practice ratings as provided by managers” (p. 369). Hence, in many circumstances, employee reports of HR practices are to be preferred to management reports. Finally, from an ethical perspective, Guest (1999) has argued that workers should be the centre stage in HRM studies as they are the key receivers of HRM. As a result, employees should be consulted directly regarding HR practices in place.

In addition to the above reasons for using employees as respondents to HR practices items, more pragmatic reasons can also be identified, such as the fact that making use of employees results in a larger sample size. For example, when an organisation has 50 teams, with each team having one line manager and consisting of 10 employees, a study making use of managerial reports would have a sample size of 50, whereas a study making use of employee reports would have a sample size of 500. This is beneficial from a statistical point of view, as it increases the statistical power of a study. In addition, if the focus is on management respondents, in order to increase the sample size, researchers would need to collect data from multiple firms, thereby significantly complicating the research design and process of data collection.

Although previous research has identified a variety of reasons to make use of employee reports, various complications can be identified as well. An important complication relates to the “recognition” of HR practices by employees. For example, although employees are aware of the monthly talk they have with their superior, they might not recognise this as part of their performance appraisal, resulting in a discrepant response to the survey item (Khilji & Wang, 2006). Additionally, differences between intended, actual, and perceived HR practices might result in disconnects between employee and managerial reports and affect the value and meaning of employee and managerial-based measures. To understand these issues more fully, studying employee and managerial reports simultaneously is important (see, e.g., Takeuchi et al., 2007), but gaining a more detailed understanding of the use and meaning of the employee-based measures that have been used more frequently in extant research is a crucial first step. The current review therefore focuses on the use of employee-based reports of HR practices.

Based on the above, it is clear that in the past 20 years or so, a number of reasons have been advanced in the HRM literature for focusing on employee perceptions of HR practices and, therefore, for using employee rather than management ratings in HRM-outcomes research. As we have seen, the arguments involved are not only varied but also potentially important and clearly require serious consideration. In the following sections, we first examine the extent to which the arguments in favour of focusing on employee perceptions of HR practices have indeed been taken up by researchers in the area. This is followed by a more detailed analysis of the nature of the employee-based measures used in extant research as a basis for gaining a better understanding of key problems and issues involved in the operationalisation and underlying conceptualisation of the perceived HR practices construct.

### 3 | METHODOLOGY

The present analysis is based on a systematic review of all empirical, survey-based HRM-outcome studies published between 2000 and 2017 in 10 top HRM-dedicated, as well as general management and applied psychology, journals. These included five US journals (*Academy of Management Journal*, *Human Resource Management*, *Journal of Applied Psychology*, *Journal of Management*, and *Personnel Psychology*) and five UK journals (*British Journal of Industrial Relations*, *Human Relations*, *Human Resource Management Journal*, *International Journal of Human Resource Management*, and *Journal of Management Studies*). By including US and UK journals, we aimed to capture potential

variation in the types of studies related to the background of the journal. Also, by only selecting journals with impact factors that exceed 2.0, we ensure the inclusion of high quality, peer-reviewed research.

The review focused on studies that are explicitly designed to examine the effect on either individual- or unit-level outcomes of a broad set or system of HR practices, rather than of a limited/focused set of practices. Hence, for example, studies examining green HRM or age-related HRM were not included in the analysis. The year 2000 was chosen as the starting point for the analysis to coincide with the first major calls for the use of employee ratings of HR practices proposed in that year by Gerhart et al. (2000) and Huselid and Becker (2000). Studies included vary in national backgrounds of respondents. The selection resulted in a total of 211 studies that made use of either management or employee ratings of HR practices, including a subset of 72 studies that made use of employee measures only.

## 4 | RESULTS

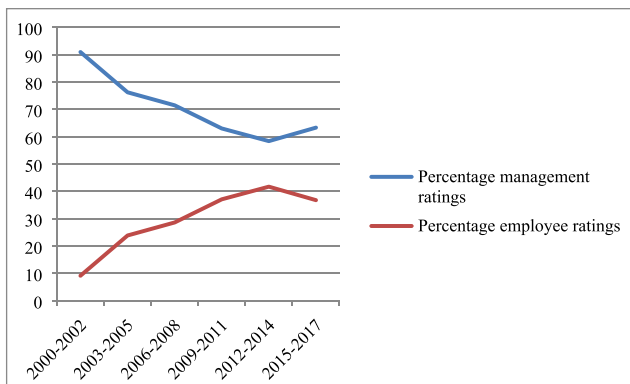
### 4.1 | The use of employee-based versus management-based ratings of HR practices

Figure 1 shows that between 2000 and 2017, there was a substantial increase in the proportion of HRM-outcomes studies making use of employee as opposed to management reports of HR practices. Thus, although in the 2000–2002 period, only 9% of studies made use of employee reports; this increased to 37% in the 2015–2017 period. Over the same time periods, there was a concomitant decrease in the proportion of studies based on management ratings of HR practices—from 91% between 2000 and 2002 to 63% between 2015 and 2017 (see Table 1 for details).

Overall, therefore, our results show that even though HRM-outcomes research is still dominated by studies that make use of management ratings of HR practices, since 2000, there has been a significant shift towards employee-based measures. Thus, by 2015–2017, nearly 40% of HRM-outcomes studies made use of employee ratings to examine employee perceptions of HR practices, thereby reinforcing the need to take a closer look at the way this core construct is operationalised and conceptualised in this major new stream of HRM research.

### 4.2 | Origins of employee-based measures and reporting practices

To examine the nature of employee-based measures of HR practices, we focus specifically on the subset of 72 studies included in our review that used such measures. As noted, our main interest here is in gaining a better understanding of key methodological and theoretical problems involved in the usage of employee ratings of HR practices. In particular, our core focus is on potential problems linked to the failure more clearly to distinguish



**FIGURE 1** Proportion of studies using employee versus management ratings of human resource management from 2000 to 2017 [Colour figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]

**TABLE 1** Number and proportion of studies using employee versus management ratings of human resource management from 2000 to 2017

Time period	Employee ratings number (%)	Management ratings number (%)	Total number
Three-year average			
2000–2002	1 (9)	10 (91)	11
2003–2005	5 (24)	16 (76)	21
2006–2008	8 (29)	20 (71)	28
2009–2011	20 (37)	34 (63)	54
2012–2014	20 (42)	28 (58)	48
2015–2017	18 (37)	31 (63)	49
Total 2000–2017	72 (34)	139 (66)	211

between factual and evaluative measures of HR practices in extant studies. To start with, however, we first briefly consider the origins and overall consistency of the employee measures used in extant research.

Table 1 shows that over the 2000–2017 period as a whole, the vast majority of the subset of 72 studies that used employee reports of HR practices made use of their own custom-made measures (86%) rather than of pre-existing scales (14%). In addition, the table shows that nearly half (29 out of 62) of the studies that made use of custom-made scales used completely new scales created specifically for the study in question. The rest of the studies in this group either used composite measures based on items taken from a variety of existing sources (19 out of 62 studies) or used existing measures that were adapted to fit the specific study context (14 out of 62 studies).

These practices are not necessarily problematic in their own right. It is worth noting, however, that when using or adapting pre-existing measures of perceived HR practices (33 studies in all; Table 2), researchers drew on a great variety of pre-existing scales as source measures. In total, in fact, we identified 22 different source measures of perceived HR practices that were used in extant studies. Moreover, only a few of these source measures were used in more than just a handful of subsequent studies indicating a generally low use of pre-existing perceived HR practices measures.

Two further general points are worth noting in this context. First is the number of different perceived HR practices constructs extant studies focus on and seek to measure using employee ratings. The most common construct is some generic notion of perceived HRM or HR practices, followed by notions of perceived high performance work systems, high involvement work systems, and high commitment HRM, respectively. Second is the failure in the majority of studies that used their own either completely new or adapted employee-based measures to report either the full set of items used in these measures or basic psychometric properties of the scales involved, such as relevant reliability coefficients.

Taken together, the above findings point to considerable idiosyncrasy in extant measures of perceived HR practices, coupled with a certain lack of clarity and transparency in the way these measures are often reported in existing studies. More fundamentally, our review so far points to a noticeable degree of fragmentation in the way the perceived HR practices construct has been measured. This may not be uncommon in the early stages of development of a research area. Overall, however, our results so far suggest a lack of convergence in the use of employee-based measures of perceived HR practices and the absence as yet, therefore, of a standard and commonly agreed measure or set of measures in this area.

**TABLE 2** Human resource management measures used in studies based on employee ratings

Time period	Own measure			Total own measure	Total existing measure
	New	Composite	Adapted		
2000–2008	9 (64%)	4 (29%)	0 (0%)	13 (93%)	1 (7%)
2009–2017	20 (37%)	15 (26%)	14 (24%)	49 (84%)	9 (16%)
2000–2017	29 (40%)	19 (26%)	14 (19%)	62 (86%)	10 (14%)

### 4.3 | Descriptive versus evaluative measures of perceived HR practices

We now extend the analysis of the operationalisation of the perceived HR practices construct to a more systematic consideration of the underlying conceptualisation of this core construct. We do this by examining the specific content of the measures used to assess employee perceptions of HR practices focusing, in particular, on the distinction between descriptive or factual versus more evaluative or subjective measures. When looking at perceived HR practices measures in greater detail, in fact, it can be observed that one core way in which these measures differ relates to whether they aim objectively to capture whether a particular practice is present or used, or whether the focus is on how the respondent subjectively evaluates the practice in question. This distinction reflects what Spector, Rosen, Richardson, Williams, and Johnson (2019) refer to as factual versus perceptual constructs and what in the job design literature are referred to as objective versus subjective job measures (Frese & Zapf, 1988). Objective or factual constructs involve more cognitively based assessments of a situation (i.e., HR practice), whereas evaluative constructs involve more affectively laden assessments of the practice in question (Wallace et al., 2016; Zhou, Dovidio, & Wang, 2013). Descriptive items would thus be conceptually closer to the notion of implemented HR practices, as described by Khilji and Wang (2006), whereas evaluative items reflect the more subjectively laden items included in the measures of perceived HR practices. For example, a factual HR item asks respondents to report whether “At least once a year associates in this job receive a formal evaluation of their performance” (Kehoe & Wright, 2013), whereas an evaluative item would be “I receive regular and constructive feedback on how well I do my job” (Macky & Boxall, 2007).

The present analysis is based on a more detailed examination of a subset of 28<sup>1</sup> out of the 72 employee-based studies included in our review that reported their employee measure in full. In examining the HR practices measures used in these 28 studies, we focus on whether the specific items used in extant scales are more factual/objective versus subjective/evaluative in nature. As noted, descriptive items refer to more observable/verifiable reports of HR practices (e.g., “Number of hours of in-house training you attended last year”), whereas evaluative items are the ones that involve a greater element of individual interpretation or evaluation of a given HR practice (e.g., “The training provided by the organisation is useful,” or “I am satisfied with the amount of training I receive”). Evaluative items are thus infused with some form of personal interpretation whereas factual items leave less room for individual interpretation and in principle, therefore, could be answered similarly by different respondents. Illustrative examples of descriptive and evaluative items of perceived HR practices are shown in Table 3.

The important point to note here is that both descriptive and evaluative items are commonly treated and conceptualised as measures of perceived HR practices in the literature that focuses on employee ratings of HRM. In addition, a given HRM scale may include combinations of more factual and more subjective items. Hence, in order

**TABLE 3** Examples of descriptive versus evaluative items

Functional area	Descriptive items	Evaluative items
Training and development	I have received training for working in teams (Mackie, Holahan & Gottlieb, 2001).	Training programmes are comprehensive (Takeuchi et al., 2007).
Rewards	Incentives are based on team performance (Takeuchi et al., 2007).	The salary in my organisation is determined based on job complexity, and this work well here (Takeuchi & Takeuchi, 2013).
Recruitment and selection	Selection emphasises their ability to collaborate and work in teams (Takeuchi et al., 2007).	Great effort is taken to select the right person (Shen, Benson, & Huang, 2014).
Performance management	Indicate what percentage of employees ... Receive a formal personal performance appraisal/feedback from more than one source (i.e., from several individuals such as supervisors, peers, etc.; Jensen, Patel, & Messersmith, 2013).	The appraisal system provides me with an accurate assessment of my strengths and weaknesses (Jensen et al., 2013).



to examine the extent of use of descriptive versus evaluative measures in the HRM literature, it is important to focus the analysis at the level of individual HR items, rather than at the level of full HR scales/measures. Accordingly, in the present analysis, the focus is on the individual items included in the scales of perceived HR practices that are then classified into two main types: descriptive items and evaluative items. Based on the 28 studies highlighted above, a total of 583 perceived HR practices items were classified by both the first and second authors. There were only minor discrepancies in coding between the two raters that were readily resolved after further discussion.

Our analysis shows that the vast majority of the 28 studies examined used overall measures of perceived HR practices that included a combination of both descriptive and evaluative items. The proportion of descriptive and evaluative items included in the different perceived HRM scales varied considerably across the 28 studies. However, the vast majority of studies used overall HRM scales that are made up of a majority of evaluative HR items, whereas more than one fifth of the 28 studies used overall HRM scales that are composed exclusively of evaluative HR items. More generally, we found that evaluative items tend to dominate HRM research based on employee ratings of HR practices. Thus, of the 583 HR items we examined, two thirds were evaluative in nature compared with one third that were descriptive. Overall, the above results direct attention to potentially important unresolved conceptual issues in the area, which can be identified as jingle fallacies. Jingle fallacies occur when two potentially different constructs are labelled and treated equivalently (Block, 1995). As we discuss more fully below, our results suggest possible jingle fallacies in extant research whereby conceptually distinct constructs are actually conflated into one construct rather than studied separately.

#### 4.4 | Evaluative items

We explore this issue further through a more fine-grained analysis of the nature of the evaluative HR items used in the subset of 28 full measure studies covered in our review. A closer examination of these evaluative items shows that they may cover quite a wide spectrum, ranging from items that involve fairly factual answers that nevertheless involve a certain degree of subjective interpretation (e.g., "Selection involves screening many job candidates"; Takeuchi et al. 2007) to items that involve much more explicitly evaluative or subjective answers (e.g., "Feedback on performance is given in a way that helps me to 'grow' and feel inspired to give my best"; Stumpf, Doh, & Tymon, 2010). Although the first item is fairly descriptive, a subjective element is included in the item by referring to whether "many" candidates are screened. In contrast, the second item is fully focused on obtaining an employees' subjective evaluation of the quality of the practice involved.

Based on this distinction, evaluative HR items can be divided into two categories: "high evaluative items" and "low evaluative items." High evaluative items focus directly on employees' subjective evaluation of whether a particular practice is, for example, perceived as fair, high in quality, or useful. Based on this type of item, a positive or negative value can be attached to the evaluation of the practice. Low evaluative items, on the other hand, have no explicit positive or negative pole. They do, however, allow room for some element of personal or subjective evaluation. Table 4 provides examples to illustrate the distinction between high and low evaluative items, respectively.

In this context, it is important to recognise, however, that the distinction between high and low evaluative items necessarily involves a certain degree of subjectivity and interpretation and, therefore, may not always be completely clear cut or straightforward. Thus, the level of interrater agreement reached by the first two authors when trying to distinguish between low and high evaluative items was lower than the level of agreement reached when rating factual versus evaluative items more generally. Most of the disagreements about the evaluative items were resolved after further discussion. However, the results presented below relating to the high versus low evaluative nature of the subjective HR items used in the 28 studies under review need to be treated with some caution.

With these caveats in mind, our analysis up to this point shows that all 28 studies under consideration used measures of perceived HR practices that involved evaluative items of some kind. The present analysis adds to this picture by showing that the proportion of high versus low evaluative items included in extant measures varied greatly

**TABLE 4** Examples of high and low evaluative human resource items

Functional area	Evaluative items	
	High evaluative	Low evaluative
Training and development	Employees in my unit have many opportunities for career development (Lee, Hong, & Avgar, 2015).	There is an effort to locate opportunities for employees to apply their expanding knowledge and abilities (Searle et al., 2011).
Rewards	Please indicate your level of satisfaction with the following practices in your organisation: The extent to which your pay reflects the contribution that you make (Conway & Monks, 2008).	Our compensations include high wages (Takeuchi et al., 2007).
Recruitment and selection	Indicate what percentage of employees ... Are hired following intensive/ extensive recruiting (e.g., your department had to put forth a lot of effort to recruit; Jensen et al., 2013).	Selection involves screening many job candidates (Takeuchi et al., 2007).
Performance management	Feedback on performance is given in a way that helps me to "grow" and feel inspired to give my best (Stumpf et al., 2010).	Specific goals are established for my job (Searle et al., 2011).

across the studies, ranging from studies that used no high evaluative items at all in their scales to the ones that relied exclusively on high evaluative items for their measures of perceived HRM. The vast majority of the studies we examined (82%), however, used various mixtures of both high and low evaluative items in their scales. More specifically, our results show that, overall, nearly two thirds (63%) of the evaluative items used in the measures of perceived HRM are low evaluative items, with the remaining somewhat more than one third (37%) of the items being high evaluative ones involving a stronger element of respondent subjectivity. As we discuss more fully below, these findings further reinforce potential concerns about jingle fallacies in extant research. They also direct attention to potential problems of common method variance (CMV) that may significantly affect the validity of HRM–outcome results in a range of extant studies based on employee measures of HR practices.

## 5 | DISCUSSION

Our review of HRM–outcomes research since 2000 shows that over the past 20 years or so, there has been an important and ongoing methodological and underlying conceptual shift in this core area of HRM research. Specifically, our analysis indicates that over this period, there has been a significant shift away from the management-based to employee-based measures of HRM, with an increasing number and proportion of studies in the area making use of employee rather than management ratings of HR practices and systems of practices. These employee ratings, used in nearly 40% of more recent studies in the area, are explicitly designed to assess employee perceptions of HR practices. This growing use of employee ratings reflects an important underlying conceptual/theoretical shift in HRM–outcomes research linked to arguments about the need to focus more explicitly on the way HR practices are perceived and experienced by employees in order to better understand the effect of HRM on a range of both individual and organisational outcomes. More generally, as we have seen, the observed shift to employee-based measures both reflects and is a direct response to persistent calls in this area, based on a variety of methodological and theoretical arguments, for the need for researchers to focus more explicitly on employee perceptions of HR practices. This review aimed to map these arguments and identify trends in the measurement of HR practices. We did not aim to suggest that the move towards employee reports is more or less valuable. However, we do observe that the arguments used in the extant literature are important and clearly deserve systematic consideration, but the way these arguments have been

taken up by researchers and their application in extant studies has been far from unproblematic. Our review has highlighted a number of important points in this respect. As we discuss more fully below, the problems identified in our analysis have important implications for the conduct and validity of research in this area and, as such, direct attention to key issues that require systematic consideration in future work.

The first point to note from our review concerns the generally low level of consistency of the employee-based measures used in extant studies. This is reflected in the proliferation of either completely new scales or of bespoke scales adapted from often a variety of different sources. This type of fragmentation is not uncommon in the early stages of development of a new research area. What is more problematic, however, is the observed failure in many cases fully to report (a) the specific items used to measure perceived HR practices, (b) the rationale behind the choice of items, and (c) basic psychometric properties of the scales involved. More generally, we found few studies that sought systematically to test the validity and reliability of the perceived HR practices measures they used. In many respects, this is quite surprising given that in various other areas of research, the validation and testing of measures is a common practice. The resulting lack of systematic evidence regarding the validity and reliability of extant measures, coupled with the lack of clarity and transparency in the construction and reporting of relevant scales, is of considerable concern and is clearly an area that requires much closer attention in future studies.

The second and more fundamental point to emerge from our analysis concerns the failure properly to distinguish between different types of measures of perceived HR practices in extant studies. In turn, this failure, we suggest, reflects a more fundamental lack of clarity and consistency in the underlying conceptualisation of the HR practices construct. On the basis of the HR practice measures that were reviewed, we suggest the need significantly to extend and refine the commonly accepted distinction made in the literature between (1) intended, (2) implemented, and (3) perceived HR practices (Arthur & Boyles, 2007; Wright & Nishii, 2007). Specifically, in line with Nishii and Wright (2008), intended HR practices (1) can usefully be said to represent the HR activities that HR departments have designed on paper, which should be implemented by HR and line managers. HR managers would be in the best position to report on these intended HR practices as the HR department has designed these activities. On the other hand, in line with Wright and Boswell (2002), implemented HR practices (2) can best be thought of as referring to activities that are implemented in units aimed at the management of work and employment. Both line managers and employees can report from their viewpoint on the practices that are put in place in the unit. Line manager reports of implemented HR practices, we suggest, are best referred to as measures of implemented HR practices (2). Finally, based on our review, we suggest that perceived HR practices (3) represent employee reports of HR practices, which should be separated into descriptive perceptions of HR practices (3a) and evaluative perceptions of HR practices (3b). Employee reports of the HR practices that are operationalised in the work unit represent descriptive perceptions of HR practices (3a) that are conceptually similar to the notion of implemented HR practices referred to above. Evaluative perceptions of HR practices (3b), on the other hand, represent interpretations and assessments of (the qualities of) HR practices. In this case, employees report on aspects of HR practices, such as their quality, usefulness, and effectiveness. We suggest that evaluative items fit the notion of evaluative perceptions of HR practices, whereas descriptive items fit the notion of descriptive perceptions of HR practices.

Given our observation that descriptive and evaluative items are often intertwined in measures of HR practices, it is all the more important to separate descriptive and evaluative perceptions of HR practices. When zooming in on these measures of perceived HR practices, our results show that both within and between studies, HR items are often used that reflect both more descriptive and more evaluative conceptualisations of the perceived HR practices construct. As argued above, in fact, factual HR items/measures essentially assess the extent to which employees perceive and report that particular HR practices are actually in place and/or that they are exposed to them (i.e., descriptive perceptions of HR practices). More evaluative items/measures, on the other hand, tap employees' more or less positive or negative assessment of the particular HR practices they are exposed to (i.e., evaluative perceptions of HR practices). Hence, HR practices measures based on factual versus more evaluative items can essentially be said to tap different constructs that, for example, can be expected to be related to different antecedents. Whether employees are actually exposed to particular HR practices (factual rating), for example, is likely to depend on management policy

and line manager uptake of these practices (Den Hartog et al., 2013), and their reaction or assessment of the practices to which they are exposed (evaluative rating) is more likely to depend on their particular needs, expectations, and actual experience of the practices in question (Marescaux, De Winne, & Sels, 2013). Despite these important differences, factual and evaluative assessments of perceived HR practices are treated similarly in extant research and conceptually conflated under the more generic and undifferentiated notion of "perceived HR practices." We argue that the notion of perceived HR practices should distinguish between descriptive perceptions of HR practices and evaluative perceptions of HR practices. Descriptive perceptions of HR practices are similar to the notion of implemented HR practices but are based on employee reports rather than manager reports. When this distinction is not recognised, jingle fallacies occur, which means that two different constructs are labelled and treated equivalently (Block, 1995). Without necessarily being aware of it, different studies focusing on the effects of perceived HR practices on outcomes may not in fact be examining the same construct or phenomenon with important implications for the accumulation of knowledge in the area. More generally, as argued by Suddaby (2010), construct clarity is an important prerequisite for knowledge accumulation in a field. Hence, the jingle fallacies identified above are a potentially important barrier to progress in the area and therefore require systematic attention in future work. In particular, based on the arguments outlined above, we advance the following proposition that we suggest should be systematically tested in future studies.

**Proposition 1:** *Descriptive and evaluative items/measures of perceived HR practices tap into and represent related but distinct underlying descriptive and evaluative perceptions of HR practices constructs, respectively.*

A third and related major point concerns the validity of some of the results of extant perceived HRM-outcomes studies. These validity problems are linked to the differential effect that different types of perceived HR practices measures may potentially have on individual and organisational outcomes of interest in this area of research. More specifically, they are linked to the widespread use of evaluative and, in particular, of what we have termed high evaluative items in extant measures of perceived HR practices. As we have seen, a significant proportion of items is of a high evaluative kind. By their very nature, evaluative HR items/measures, and especially high evaluative ones, are more affectively laden than descriptive HR items/measures. Hence, we would expect affectively laden outcome variables, such as employee attitudes like job satisfaction and affective organisational commitment, to be more strongly related to evaluative than to descriptive measures of perceived HR practices. There are a number of theoretical arguments involved here. As we explain below, however, the basic underlying problem here is essentially one of CMV. Specifically, it is linked to the fact that the relationship between measures of perceived HR practices and various types of outcomes is likely to be affected and, for example, artificially inflated, by the nature of the HR items/measures that are used.

As argued by Spector et al. (2019), CMV does not arise simply as a result of the nature of the method used (e.g., self-report items). Rather, it "represents extraneous and unintended systematic influences on a measured variable, some of which may be shared with other measured variables" (p. 856). Hence, as noted by Spector et al. (2019), there may be many factors that contribute to CMV. At the simplest level, in the case of HRM-outcomes research, the use of self-report measures to assess both employee perceptions of HR practices and employee attitudes, such as job satisfaction or organisational commitment, is likely to contribute to CMV (Arnulf, Larsen, Martinsen, & Bong, 2014; Podsakoff, MacKenzie, & Podsakoff, 2012). The risk of CMV, however, is increased even further when the HR practices and outcome measures involved have a similar affective tone or base. Mood congruency effect arguments (Bower & Forgas, 2001), for example, suggest that individuals are likely to respond to questionnaire items in a way that is congruent with their mood. However, because of the more subjective and affectively laden nature of evaluative items, there is greater scope for moods, whether positive or negative, to influence responses on evaluative than on descriptive HR items. Hence, CMV problems are likely to be more acute when evaluative rather than more descriptive perceptions of HR practices are studied in combination with more affectively laden and subjectively based employee outcomes. Similar arguments apply in terms of employees' overall feelings (positive or negative)

towards the organisation. Such feelings can also be expected to colour their responses to both evaluative perceptions of HR practices and more affectively laden outcome measures, thereby artificially inflating observed correlations between these variables. As this negatively affects the value of studies, it is recommended that future studies focusing on the relationship between evaluative perceptions of HR practices and affectively laden outcome measures avoid the use of single-source, cross-sectional data. Researchers are instead recommended to make use, particularly for these types of research questions, of longitudinal research designs. At the same time, it is worth noting that less affectively laden employee outcomes, such as human capital variables and in-role performance, may be equally well predicted by both descriptive and evaluative perceptions of HR practices and, in general, are less likely to suffer from CMV problems.

Finally, in this context, it is important to note that 52 out of the 72 employee-based studies we examined as part of our review included some form of more subjective and more affectively based individual outcome in their analysis. The outcomes involved covered a wide range of individual variables including, for example, job satisfaction, affective organisational commitment, organisational identification, perceived organisational support, trust in management, burnout, and work-life balance. Questions about the validity of results linked to the nature of the HRM measures used and associated problems of CMV are likely, therefore, to be of considerable significance in this area of research and clearly deserve serious attention in future studies.

More generally, we suggest that different ways of conceptualising and measuring HR practices can be expected to produce different results. This problem, however, has received no attention to date with meta-analyses, for example, drawing conclusions on the basis of the questionable assumption that the use of different HR practices measures does not impact the observed relationship with outcomes (e.g., Subramony, 2009). On the basis of the arguments outlined above, therefore, we advance the following propositions that we suggest should be systematically examined and tested in future studies.

**Proposition 2:** *The greater the proportion of evaluative rather than descriptive items that are included in the perceptions of HR practices measure, the more strongly related the measure will be to more affectively laden employee outcomes.*

**Proposition 2a:** *The greater the proportion of high evaluation items, compared with other types of items, that are included in the perceptions of HR practices measure, the more strongly related the measure will be to more affectively laden employee outcomes.*

**Proposition 3:** *The proportion of evaluative compared with descriptive items that are included in the perceptions of HR practices measure will not significantly affect the strength of the measure's relation with less affectively laden employee outcomes (e.g., in-role performance).*

**Proposition 3a:** *The proportion of high evaluation compared with other types of items that are included in the perceptions of HR practices measure will not significantly affect the strength of the measure's relation with less affectively laden employee outcomes (e.g., in-role performance).*

## 5.1 | The use and further development of employee measures of HR practices in future studies

Based on the above, a number of recommendations are provided related to the conceptualisation and measurement of the HR practices construct in future studies as well as for studies specifically aimed at examining the validity of measures.

First, future studies that make use of employee-based measures of HR practices are advised to report more extensively regarding the HR practice measure used and the rationales behind them. In case self-created scales are

used, full items should be reported and a justification should be provided for why these items are used. In case of adapted existing scales, authors should elaborate on the adaptations made.

Second, authors are advised to either include descriptive or evaluative items in HR practice measures, instead of a combination of both types of items. It is shown that these two types of items are conceptually distinct and including both in one measure will therefore hamper construct validity. In determining the type of measure to be used, authors are advised to evaluate the strengths and weaknesses of both measures of HR practices related to the objective of the study and the outcomes included. For example, authors should carefully consider the use of evaluative items in combination with affectively laden outcomes given the expected problems related to CMV when studying this combination of constructs.

Third, to enhance the validity of measures of perceived HR practices, researchers are urged to conduct empirical studies to examine the empirical distinctiveness of descriptive and evaluative perceptions of HR practices measures. By comparing the two types of measures, discriminant validity can be established, herewith testing Proposition 1. Both types of measures would then be included in a single study, and based on various statistical methodologies, the distinctiveness of measures would be established. In addition, establishing differential relationships with antecedents and outcomes, in line with Propositions 2 and 3, would significantly contribute to our understanding of the perceived HR practices construct and to our knowledge of the relationship between HR practices and outcomes in general.

Finally, understanding in more detail the meaning and measurement of intended, implemented, and perceived HR practices is important for the further development of HRM research. Addressing inconsistencies and lack of clarity in the conceptualisation of key constructs in HRM research, also linked to other frequently studied constructs such as HR systems (e.g., high performance work systems; see Jiang et al., 2012) and organisational performance, is crucial. Given the inconsistencies in the use of the performance construct by different researchers, a detailed analysis is required to further clarify this construct, which can ultimately contribute to the accumulation of knowledge in the area. In addition to understanding the current trend towards the use of employee-based reports<sup>2</sup> of HR practices, fully understanding intended, implemented, and perceived HR practices requires additional research that builds further on existing studies including both employee and managerial reports of HR practices (e.g., Den Hartog et al., 2013; Takeuchi et al., 2007). Studying, for example, whether employee and managerial reports of descriptive perceptions of HR practices are more strongly correlated than employee and managerial reports of evaluative perceptions of HR practices is an important step in this respect. Additionally, leadership literature could provide insights into the conditions under which employee and managerial reports are more or less consistent and congruent with each other. The implications of congruent and noncongruent perceptions and the conditions under which these inconsistencies are more or less prevalent would provide potentially useful avenues for future research (Wong & Giessner, 2018; Wong & Kuvaas, 2018).

## 6 | CONCLUDING REMARK

This review has illustrated the turn to employees in the measurement of HR practices that has taken place in HRM–outcome research over the last 20 years. Although there are strong arguments in favour of using employee-based measures of HR practices, our critical review of the actual measures that have been used in extant research has directed attention to a number of important unresolved problems and issues in this area. In particular, our review suggests that in order for this stream of research to progress, greater clarity in the HR practices construct is required. Particularly important in this respect is the need to more clearly distinguish between descriptive and evaluative perceptions of HR practices, thereby helping to enhance the validity of results and ultimately contributing to the accumulation of knowledge in the area.

## CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

## ENDNOTES

- <sup>1</sup> The 28 studies were as follows: Andreeva and Sergeeva (2016); Ang, Bartram, McNeil, Leggat, and Stanton (2013); Castanheira and Chambel (2010); Chen, Zhang, and Fey (2011); Conway and Monks (2008); Gong, Law, Chang, and Xin (2009); Harley, Allen, and Sargent (2007); Jensen et al. (2013); Kaše, Paauwe, and Zupan (2009); Kaya, Koc, and Topcu (2010); Kehoe and Wright (2013); Kooij et al. (2013); Lee et al. (2015); Mackie et al. (2001); Macky and Boxall (2007); Marescaux et al. (2013); Messersmith, Patel, Lepak, and Gould-Williams (2011); Piening, Baluch, and Salge (2013); Searle et al. (2011); Shen et al. (2014); Shen and Zhu (2011); Shih, Chiang, and Hsu (2010); Stumpf et al. (2010); Sun, Aryee, and Law (2007); Takeuchi and Takeuchi (2013); Takeuchi et al. (2007); Vandenberg, Richardson, and Eastman (1999); and Wright, Gardner, and Moynihan (2003).
- <sup>2</sup> With respect to the selection of employees for participation in survey research, it is important to recognise current changes in the employment system resulting in an increase in agency workers and contractors (Kalleberg, 2000). As a result, care should be taken that employees surveyed in a location are actually covered by the same HR system. Although employees could be working in the same workplace, they might be employed by different parties, resulting in them being covered by different HR systems and different management systems being studied. Given that this type of worker is nowadays more frequently present in organisations, care should be taken that the correct type of respondent is targeted for inclusion in the survey.

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**How to cite this article:** Beijer S, Peccei R, van Veldhoven M, Paauwe J. The turn to employees in the measurement of human resource practices: A critical review and proposed way forward. *Hum Resour Manag J.* 2019;1–17. <https://doi.org/10.1111/1748-8583.12229>