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ABSTRACT

This study presents a taxonomic foundation for research on employee performance management practices based on a comprehensive review of the literature (198 articles and book chapters). The taxonomy consists of 50 practices organized within seven topic categories, including an evaluation of the amount of research evidence supporting each practice. This taxonomic foundation facilitates the aggregation, integration, interpretation, and explanation of performance management research based on a role-theoretic perspective derived from the behavioural approach to strategic human resource management. The proposed direct-linkage path model shows how this taxonomic foundation ties performance management practices to behaviours and results. We build on this Practice – Behaviour – Results (PBR) critical path model with moderators and mediators based on cognitive and social factors identified in the extensive previous research. This PBR model provides a foundation for orderly and structured growth for future research that will enhance the connection between research and improved organizational practices in performance management, as well as a guide to best practices in performance management.

Introduction

Performance management (PM) practices are often viewed as serving numerous critical functions for organizations. For example, they are considered one of many high performance work practices potentially capable of improving unit-level outcomes (e.g., organizational performance) (Posthuma, Campion, Masimova, & Campion, 2013). Further, some types of PM practices such as performance evaluations can be valuable towards the development of more effective selection, compensation, and training and development systems. However, some PM practices can also create considerable problems for organizations as well as their employees. For example, overly lenient appraisals can undermine an organization's ability to develop effective human resource (HR) management systems. Inflexible systems can fail to give employees credit for their unique contributions to the organization. Both employee raters and ratees often experience anxiety during the evaluation process, and employee dissatisfaction with appraisal systems can be demotivating and fail to improve performance. Thus, it is not surprising that 100 years of research on this topic has attempted to address these issues (DeNisi & Smith, 2014).

Moreover, in recent years many organizations are becoming increasingly dissatisfied with their PM process (Pulakos, Hanson, Arad, & Moye, 2015). Many have gone so far as to eliminate key elements of their PM process such as performance ratings (Adler et al., 2016). One study found that 30 Fortune 500 companies had reportedly abolished their performance evaluations (Goler, Gale, & Grant, 2016). Nevertheless, employers are also adapting their PM processes by improving goal setting, adding more frequent feedback, etc. (Adler et al., 2016). Thus, the key question is not whether PM should be eliminated, but how can it be improved (Goler et al., 2016; Pulakos et al., 2015). For example, performance feedback meetings that are more real-time and flexible could improve the perceptions and effectiveness of the PM process (Pulakos et al., 2015). Therefore, a goal of this literature review is to identify ways to improve the PM process through summarizing and integrating prior research so that the scholarly research community can identify important questions that can be answered.

Despite this considerable interest and the valuable contributions made by prior research, a number of important issues remain. First, the traditional focus of research on employee evaluations has been on gaps previously left unexplored and micro-level issues. This piecemeal or fractionated approach has unfortunately left us in a state that not only begs the question of what we really know, but is also stifling theoretical progress as drawing clear connections among so many studies remains a difficult prospect. Second, organizations often face a difficult dilemma when using some types of PM practices such as evaluations. On one hand, evaluations are useful and beneficial because managers need to evaluate performance accurately and give constructive feedback to employees in order to motivate and improve performance. On the other hand, evaluations are oftentimes harmful and destructive because stress

and conflict can be created between employees and managers when feedback is given that is viewed as unfavourable or inaccurate. Third, a science-practice divide exists, such that theory-based research, while valuable towards building scientific knowledge, has not always focused on issues most relevant and critical to PM practice (Arvey & Murphy, 1998; Banks & Murphy, 1985; Landy & Farr, 1980; Levy & Williams, 2004; Murphy & Cleveland, 1995). Theory-based research is typically the type of scientific evidence that is published in journal articles. The purpose of this paper is to advance scholarship in this area by addressing these limitations in four specific ways.

First, although there are already small number of fairly recent or forthcoming reviews of PM, we go beyond and complement those reviews in several ways. Those reviews generally focus on a specific topic (e.g., firm performance, DeNisi & Smith, 2014; pay for performance, Rynes, Gerhart, & Parks, 2005; social context, Levy & Williams, 2004). Our focus is on conducting a comprehensive review. Those reviews tend to either not consider, or deemphasize, the value of the past 100 years of research performed when it comes to explaining how to improve PM in firms (e.g., DeNisi & Smith, 2014; DeNisi & Pritchard, 2006; Levy & Williams, 2004). We explicitly summarize the extent of evidence from prior research as a foundation for our framework. The theoretical models and frameworks proposed in these reviews are less comprehensive because they sometimes focus only on the contributions of a particular journal (e.g., DeNisi & Murphy, 2017) thereby restricting the range of factors and variables they consider (DeNisi & Smith, 2014; Gruman & Saks, 2009), and they also tend to lack a multilevel orientation (DeNisi & Murphy, 2017; but cf., DeNisi & Smith, 2014). Our model attempts to be comprehensive, including the identification of multilevel considerations. Those reviews tend to offer little in the way of theory-based, actionable guidance to firms regarding the specific types of PM practices they should be adopting to target the improvement of outcomes. In contrast, this is an explicit focus of our review, which considers practices targeted at a wide range of types of behaviours (e.g., in-role, extra-role) and results (e.g., productivity, customer service, innovation), as well as levels of influence (e.g., individual, team, division, firm).

Second, based upon an extensive review of the literature, we develop a comprehensive taxonomy of PM practices. We also identify the extent of research or other support for each practice. This taxonomy integrates performance evaluation practices into a broader PM taxonomy. In constructing our PM taxonomy, we ground our theoretical foundation in the behavioural perspective from strategic human resource management (SHRM) (Jackson, 2013; Jackson & Schuler, 1995; Jackson, Schuler, & Jiang, 2014). This taxonomy advances scholarly thought on PM because it imposes order on the myriad practices and constructs examined in prior research, and identifies the extent of support for each practice. This careful illumination of the range of PM practices can also facilitate research on different combinations and permutations of practices that enhance the likelihood of success in different organizations.

Third, we propose a theoretical framework of PM based on our review and taxonomy. The value of this framework lies in its ability to tie together prior research, enable the identification of all known combinations and permutations of practices, behaviours, and results (as well as their moderating social and cognitive factors), and serve as a "roadmap" for future research on PM practices. In addition to explicating the framework, we use the framework to develop a set of specific propositions that identify fruitful avenues for future research.

Fourth, this broad-ranging yet organized structure provides a comprehensive and systematic summary that can be used to identify numerous sets of practices that could address negative outcomes. These include inflated ratings, negative user reactions, disgruntled and demotivated employees, supervisors who dread conducting performance reviews, etc. (Taylor, Tracy, Renard, Harrison, & Carroll, 1995). Through the identification of appropriate combinations and permutations of these practices, researchers will be better able to identify multiple ways that these negative effects can be reduced.

Refocus from Performance Evaluation (PE) to PM and a more strategic view

The focus on PE tends to be retrospective, critical, and judgmental (Darling, 2013). On the other hand, a PM approach focuses on encouraging future changes to employee behaviours, which is much more positive and developmental (Aguinis, 2014; Kinicki, Jacobson, Peterson, & Prussia, 2013). We propose that research focus on the more inclusive framework of employee PM. Further, unlike the narrower focus on measurement and assessment, which can tend to have negative connotations, the broader PM focus is more inclusive of optimistic and motivational concepts (e.g., action planning, goal setting). This more inclusive PM framework can also identify a broader range of possibilities that may help to resolve the pernicious negative effects of employee PEs. As we discuss below, it can facilitate the identification and use of multiple PM practices that may work together synergistically to improve performance and avoid negative reactions. It will also help to elucidate the domain of practices and to identify those that will be appropriate in different social and cognitive contexts.

The theoretical foundation for the taxonomy of PM practices we develop is grounded in the behavioural theory of SHRM. This theory has its genesis in role theory as proposed by Katz and Kahn (1978). According to role theory, the jobs that employees hold are considered roles with norms that define obligatory, acceptable, and prohibited behaviours. A fundamental assumption in this theory is that employee behaviours are malleable (Katz & Kahn, 1978). It has been shown that social contexts can influence perceptions of job role requirements (Dierdorff & Morgeson, 2007). PM practices can function as important social cues about the role expectations signalling to employees how they should behave within their various roles at work (Biddle, 1979; Dierdorff, Rubin, & Bachrach, 2012). Thus, PM practices can modify employee role behaviours.

The behavioural perspective of SHRM focuses more directly on employee behaviours that match employee roles (Jackson, 2013). A fundamental premise is that organizational performance improves when employee behaviours match

appropriately with their roles. This strategic perspective also posits that there is no single set of best practices. Rather, practices should fit or match with the organizational strategies. Therefore, a broad range of practices needs to be identified to understand better how practices match with strategies. The result of choosing a combination or permutation of practices that correctly matches the organization's strategy will be a unique source of sustained competitive advantage, which is of critical importance according to other views of management such as the well-recognized resource-based view (Barney, 1991).

This theoretical focus on PM has several key advantages. First, focusing on PM rather than PE is more encompassing of the entire performance process and more developmental (versus judgmental) in orientation, which is more likely to be accepted by users, and, therefore, likely to be more effective. Second, the behavioural perspective from strategic management helps us understand how PM practices will influence behaviours, namely, by creating a more linear direct line of sight between organizational strategy, role expectations, and organizational performance. This will enable managers to see how PM practices matter to the business and that there are sensible ways to manage them (Boudreau & Rice, 2015; Capelli, 2015). Third, it recognizes that there is no single set of best practices. Rather, a degree of substitutability and equifinality exists regarding human resource management practices so long as there is a fit with the organization and its strategy (Katz & Kahn, 1978).

Closing the gap between research and practice: a taxonomic evidence-based management (EBMgt) foundation

For decades, there has been a substantial and frequently-discussed gap between the theory-based research literature and organizational practices in the field of PM. This gap has resulted in theory-based research not always focusing on issues most relevant to practice, which, in turn, exacerbates its inability to address the negative effects of evaluations. Also, practitioners may believe that they are using valid practices in their organizations, and therefore are not interested in the advice of the academic community.

To address this concern, academic researchers should accumulate the findings that are supported by the strongest scientific evidence and organize that information into a readily accessible format related to the practice of PM. This accumulation should include the research about PE, but integrate it into the broader focus of PM. A broad-based and thoughtful summary of the theory-based research can answer many questions about the how, when, where, and why of relationships between PM practices and outcomes.

Such a summary might close the gap between theory and practice if it is built on evidence-based management (EBMgt). It can also help to identify important practical issues that have not been addressed by prior research. For example, can PM processes be designed so that they are efficient (i.e., not overly burdensome) and effective in motivating higher levels of performance, but also avoid negative user reactions?

Recent scholarship has shown EBMgt can facilitate useful linkages and close gaps between theory and practice (Pfeffer & Sutton, 2006; Rousseau, 2012a; Rynes, Giluk, & Brown, 2007). EBMgt focuses on using the best available scientific knowledge to inform managerial practices. For example, prior research has clearly shown that specific and challenging goals and accurate performance feedback improve employee performance (e.g., Rousseau, 2012b).

EBMgt includes four elements that incorporate the use of: the best available scientific evidence, business metrics and indicators, reflective judgment with decision aids, and ethical standards that consider stakeholder interests (Rousseau, 2012a). Scientific evidence is typically considered the type of empirical data published in peer reviewed journal articles (Briner & Denyer, 2012). An important first step in implementing EBMgt is the synthesis of available scientific evidence in a systematic fashion (Rousseau, Manning, & Denyer, 2008). Research syntheses are systematic reviews of existing research that are designed to accumulate knowledge, highlight opportunities for further research, and to inform practice (Briner & Denyer, 2012). Rousseau recommended four approaches for EBMgt research syntheses: aggregation, integration, interpretation, and explanation (Rousseau et al., 2008).

Prior research has tended to simply summarize what is known by topics rather than create a systematic structure of practices, such as a taxonomy (Rousseau et al., 2008; Rynes et al., 2005). However, we propose that useful structure can be added to this field with the addition of a taxonomic summary of the PM practices. A taxonomy of PM practices will strengthen the usefulness of other methods of research syntheses by summarizing and organizing the practices. We propose that a helpful preliminary step along the path to an EBMgt synthesis of PM practices research is to develop a taxonomy of the domain of past and current PM practices. This will facilitate building on existing research without omitting important elements.

Therefore, we intend to build upon the previously identified research syntheses with a new taxonomic foundation. To accomplish this, we summarized the peer-reviewed academic and professional literature so that a comprehensive taxonomic model of recommended practices for employee PM could be constructed. To explicitly ensure an EBMgt research syntheses, we identify and evaluate the extent of scientific or other evidence supporting each practice and incorporate that into the taxonomy.

Taxonomies are the fundamental building block of research literatures. A good taxonomy is comprehensive, has conceptually independent elements, and each element has its own research history (e.g., see Fleishman & Quaintance, 1984, in the domain of human abilities). The taxonomic structure proposed here will attempt to meet these criteria in order to facilitate a synthesis of the voluminous literature. A taxonomic summary of relevant practices will also ensure that all aspects of the PM process are considered. For this reason, we offer a helpful addition to Rousseau's four approaches for synthesizing EBMgt research through the creation of a taxonomic structure that will serve as a guide and foundation for more rapid and orderly accumulation and use of research.

The creation of a taxonomy is important because it can enhance the ease with which researchers and practitioners can access information that they can use to inform EBMgt (Bartlett & Francis-Smythe, 2016). It will do so because there will be enhanced standardization of terminology, and this will facilitate easier recall and access to terminology that will enable them to identify the best available scientific evidence that would be relevant for EBMgt applications and also for researchers who seek to build upon a prior body of knowledge (Bartlett & Francis-Smythe, 2016; Briner & Denyer, 2012; Fleishman & Quaintance, 1984). Moreover, it will also enable the practice of EBMgt through three other important sources of information identified by Briner and Rousseau (2011). The first is practitioner expertise and judgment, and for that reason we included those publications in the creation of the taxonomy. The second and third are evidence from the local context and perspectives of those who might be affected by decisions. In order to facilitate the use of this type of information we created a broad-based taxonomy that includes a comprehensive list of practices, and clearly state that this is not intended to be a checklist of every practice that all organizations should use. Rather, evidence from the local context and the perspectives of those affected should be incorporated into decisions about which practices from the taxonomy are appropriate for each context.

Moreover, we integrate mediator and moderator variables into this model. This ensures that the model incorporates all the other known and important factors that explain the when, why, and how the practices lead to effective behaviours and positive outcomes. It is our hope that research based on this model will not only reduce the gap between science and practice, but it will produce many other useful byproducts, including research streams that more clearly tie practices to specific behaviours and also provide linkages to important and novel kinds of organizational performance such as creativity and innovation (Yuan & Woodman, 2010).

To build a taxonomic foundation for PM practices we focus on the direct linkages among PM practices, behaviours, and outcomes. This better reflects the strategic value of the practices towards aligning role expectations and thus behaviours with outcomes valued by the organization. This also builds upon the foundation of the extensive prior literature on instrumentation, cognitive factors, and social factors. Starting in the 1950s and continuing into the 1980s, the dominant research in this field focused on measurement and instrumentation issues. Included in this era was a focus in the 1970s on what were referred to as behavioural rating scales such as behaviourally anchored, behavioural observation, and behavioural expectation scales (Borman & Vallon, 1974; Latham, Fay, & Saari, 1979; Zedeck, Imparato, Krausz, & Oleno, 1974).

Beginning in the 1980s there was a surge in research that focused on cognitions related to PM practices (Bretz, Milkovich, & Read, 1992; Feldman, 1981). Some have referred to this era as the cognitive revolution. The more recent trend since about 2000 has focused on social issues such as social context and culture (Peretz & Fried, 2012; Pichler, 2012). This era might be called the contextual revolution.

Rather than ignore the important insights that have been gained over these periods, we propose that future research build upon and integrate these research streams through a framework that links them to the core relationships between performance evaluation practices, behaviours, and performance outcomes. This model incorporates the historical development of research on PM practices, increasing the likelihood that all important influences in the PM domain are included. However, it is focused to emphasize the most core relationship that practitioners expect. That is, the relationships that begin with PM practices that practitioners can develop and control, resulting in desired employee behaviours that, in turn, lead to performance results. Practices are cast as input factors, behaviours along with cognitive and social factors as moderators and mediators are cast as process factors, and the results are cast as output factors. Including the known mediators and moderators will help identify the alternative practices that fit the context of the organization, thus ensuring fit and possibly reducing employee resistance.

Method

We have identified 50 distinct PM practices that have been recommended by the literature based on an extensive literature review. We provide definitions of the practices, along with nearly exhaustive supporting citations. We also explicitly identify the extent of research or other evidence supporting each practice. We have devised an organizing framework that logically partitions these practices into seven overarching descriptive categories that we have titled: Strategic Connections, Sound Content, Meticulous Ratings, Professional Administration, Prospective Development, Rich Communication, and Review and Documentation.

The first step was to conduct a thorough search of the extant literature on recommended practices. These were the practices that the research and practitioner literatures directly endorsed or advocated for use by organizations or that can be inferred from that literature. We included the practitioner literature because there are a few practices that have not been the subject of research but are known and used by organizations. Scholars have noted that systematic reviews of EBMgt could include information from a variety of sources that include sources other than peer-reviewed journal articles (Bartlett & Francis-Smythe, 2016; Briner & Denyer, 2012). Practitioners often rely on these varying sources for information and guidance on the practices that they should use (Bartlett & Francis-Smythe, 2016). Many of these practices are obvious or so mundane that they do not require a research study to support them.

Keywords that were used to perform the search included: performance review, performance evaluation, performance appraisal, job performance, performance management, organizational citizenship, citizenship behaviour, appraisal interview, supervisor ratings, employee ratings, performance rating, and performance feedback. Articles related to other issues such as compensation and incentive research, financial performance of the organization, organizational-level productivity, etc., were excluded.

An initial search yielded over 19,000 citations. These citations were narrowed down by relevance and quality indicators. This yielded about 2,500 citations, which were reviewed for relevance by reading titles and abstracts. All articles and books that appeared potentially relevant were obtained and read. Many additional relevant articles were identified by cross-referencing and forward searching. In total, 198 relevant articles and books were obtained and summarized.

To create the taxonomy, we used a balanced approach that focused on a combination of comprehensiveness and parsimony (Whetten, 1989). We used a combination of a modified Delphi-like procedure among the co-authors and theoretical analysis to develop conceptually coherent categories of specific practices that were recommended by the research literature. We sought to include all relevant dimensions of this research literature. We combined practices using logical partitioning and grouping to create a comprehensive yet parsimonious classification schema of practices.

We then evaluated the extent of research or other evidence supporting each practice using the following scale:

(1) Professional support only – the profession commonly uses this practice, but it has not yet been tested empirically. Often these are practices that are so obvious or mundane that research is not necessary.
(2) Theoretical support only – theory supports this practice, but it has not yet been tested empirically.
(3) Indirectly tested – research studies have indirectly tested this practice by finding support for correlated variables or there is support based on other clear inferences from the findings of the studies.
(4) Directly tested – research studies have directly tested this practice and found support.

Two of the authors independently rated each practice on this scale, achieving 76% agreement. The discrepancies were resolved by the third author who reviewed the supporting articles.

Given the volume of the literature, it was judged that the list of practices that were identified was sufficiently complete so as to represent adequately the domain of recommended practices published in relevant scientific and professional literature. The review attempted to identify all articles and books that appeared to be relevant to recommended PM practices, and the review continued until only redundant practices were being identified and the list of practices was essentially exhaustive. The result of this review of the literature was the identification of 50 best practices in developing and implementing PM. Each practice is supported by 1 to 65 citations to the literature, with an average of about 22. In some cases, these practices overlap with the existing literature, but are broken down into more refined categories. For example, the ProMES model mentions Validity and Controllability (Pritchard, Harrell, DiazGranados, & Guzman, 2008). Those two practices that are implicit in two subcategories in the taxonomy (Validity is considered in Well-aligned and Job Related) and Controllability is considered in Contextual Contingencies and Constraint Management). The overall result of this taxonomy is a new and unified integration of this diverse literature into a single theoretical framework.

Employee PM: a taxonomic framework

The outline of this framework is shown in Table 1. This table contains the major categories of practices and abbreviated titles for each practice. A complete description of each of the practices along with the degree of research or other evidence supporting the practice are shown in Table 2. The full set of literature citations supporting each practice are available online. The following discussion describes these categories and the practices in each.

Strategic connection

The first element in the PM taxonomy is based on the behavioural perspective of SHRM (Jackson, 2013). Practices that employers use to evaluate the performance of their employees should have strategic connections to business goals and other HR practices (Posthuma et al., 2013). PM practices are strategic when they are well-aligned with business goals and objectives

Table 1. Research-based taxonomy of employee performance management practices.

STRATEGIC CONNECTION	PROFESSIONAL ADMINISTRATION	PROSPECTIVE DEVELOPMENT
Well aligned	Contextual contingencies	Employee development
Internally linked	Performance observation	Separate development
SOUND CONTENT	Comparison similarity	Planning goals
Expert development	Trained evaluators	Constraint management
Job related Content	Motivated evaluators	Career development
Work or Employee attributes	Clear instructions	Performance improvement plan
All contributions	Decision timeliness	Promotability potential
Observed behaviours	Regularity	**RICH COMMUNICATION**
Specific detail	Feedback frequency	Process communication
Objective data	Information recording	Expectation Communication
Multiple sources	User-friendly software	Feedback discussion
Multiple raters	HR monitoring	Employee interpretations
Self-evaluations	Efficient process	Participative goals
METICULOUS RATINGS		Individual differences
Distinguishable levels		Organizational vernacular
Clear criteria		**REVIEW & DOCUMENTATION**
Standardized process		Calibrated results
Absolute and relative Comparisons		Managerial oversight
Differentiated ratings		Appeal mechanism
Narrative comments		Documented process
		Process review

Table 2. Explanation of the practices and extent of research support for each in the taxonomy of employee performance management practices.

Category/Practice	Support
STRATEGIC CONNECTION	
Well aligned: The PM practices should be aligned with the business goals and objectives and supported by top management.	Theoretical support only
Internally linked: PM practices should be linked to other HR systems (e.g., compensation, promotion, termination, career development, etc.).	Directly tested
SOUND CONTENT	
Expert development: Subject matter experts, such as job incumbents or managers, should have input on the development of the practices to ensure usability and acceptance.	Directly tested
Job related content: The content of the PM practices should be based on a job analysis or shown to be job related.	Directly tested
Work or Employee attributes: Evaluations should normally evaluate employees in terms of either the work itself (e.g., responsibilities, performance dimensions, etc.), employee attributes (e.g., skills, competencies, knowledge, dependability, motivation, etc.), outcomes (e.g., productivity, quality, etc.), or a combination thereof.	Directly tested
All contributions: All aspects of contribution should be including in addition to task performance, such as teamwork, citizenship, support for company culture, support for diversity, etc.	Directly tested
Observed behaviours: Evaluations should be based on observable job behaviours to the extent possible, as opposed to trait oriented.	Directly tested
Specific detail: Evaluations should be specific rather than global and sufficiently detailed.	Directly tested
Objective data: Objective performance data should be considered to the extent possible (e.g., productivity, quality, profits, customer service, etc.).	Directly tested
Multiple sources: 360 feedback (e.g., from peers, subordinates, customers) should be collected and considered as appropriate either formally (e.g., via survey) or informally (e.g., via oral input).	Directly tested
Multiple raters: If feasible, multiple evaluators should be used (e.g., panel review).	Directly tested
Self-evaluations: Self-evaluations should be collected and considered as input to the performance reviews.	Directly tested
METICULOUS RATINGS	
Distinguishable levels: The format of rating scales (e.g., types, levels, etc.) should be tailored to distinguish between levels of performance.	Directly tested
Clear criteria: Rating scales (criteria) should be clearly defined (e.g., using definitions, anchors, or similar methodology) and understandable to managers and employees.	Directly tested
Standardized process: The rating process should be standardized (e.g., using forms, procedures, etc.) and reliable.	Directly tested
Absolute and relative comparisons: Feedback should include both an absolute performance appraisal (e.g., compared to expectations) and a relative performance appraisal (e.g., compared to other employees).	Indirectly tested
Differentiated ratings: Ratings should adequately differentiate performance across employees by using ranking, a target distribution, or similar approach, if needed.	Indirectly tested
Narrative comments: Ratings should be supported by narrative comments that are adequately detailed and clearly written to serve the purpose of the evaluation (e.g., to explain appraisal, give feedback, promote development, etc.).	Directly tested
PROFESSIONAL ADMINISTRATION	
Contextual contingencies: Ratings of performance should be made with consideration of potential biasing factors (e.g., types of job, business conditions, opportunity to perform, unexpected events, other constraints, etc.).	Directly tested
Performance observation: reviewers should have the opportunity to frequently observe the employees' job performance or otherwise be knowledgeable of employees' performance through other means (e.g., by monitoring output).	Directly tested
Comparison similarity: Evaluations should compare employees doing the same or similar work.	Theoretical support only
Trained evaluators: Evaluators should be trained in how to administer the evaluations (e.g., purpose, giving feedback, developing employees, avoiding rating errors and bias, having proper frame-of-reference, etc.).	Directly tested
Motivated evaluators: Evaluators should be motivated to conduct evaluations well through training, incentives, managing the social context, considering individual differences of the reviewer, and other means.	Directly tested
Clear instructions: Evaluators should be given specific and clear instructions on procedures and completing forms.	Indirectly tested
Decision timeliness: Evaluations should be conducted close to the time when the results will be used for personnel decisions.	Indirectly tested
Regularity: Evaluations should be conducted routinely, usually on an annual basis.	Indirectly tested
Feedback frequency: There should be a mid-year or other intermediate review during the year to ensure progress is being made and to provide guidance. Ideally, feedback should be a regular, an ongoing process.	Directly tested
Information recording: Managers and employees should be encouraged to record performance related information throughout the year as input to evaluations.	Directly tested
User-friendly software: PM practices should be enabled by user-friendly computer software to make them efficient and timely.	Professional support only
HR monitoring: Administration of evaluations should be monitored by Human Resources.	Professional support only
Efficient process: The process should not be unduly burdensome in terms of time, costs, etc.	Professional support only
PROSPECTIVE DEVELOPMENT	
Employee development: Evaluations should be developmental (e.g., indicate how to improve) in addition to evaluative.	Directly tested
Separate development: Evaluations should be separate for development versus appraisal (e.g., separate meetings and forms, etc.).	Directly tested
Planning goals: Evaluations should usually include a performance planning or goal-setting component.	Directly tested
Constraint management: Performance review meetings should provide an opportunity to identify and eliminate obstacles and constraints to effective performance and development.	Directly tested
Career development: Evaluations should usually include a discussion and possibly a plan for career development.	Indirectly tested
Performance improvement plan: A detailed remedial performance improvement plan should be developed if serious deficiencies exist, with guidance from Human Resources.	Indirectly tested
Promotability potential: Evaluations should evaluate potential for higher level jobs if used as input to succession management.	Theoretical support only
RICH COMMUNICATION	
Process communication: The policies, procedures, uses of the data, and other aspects of the process should be clearly communicated to employees.	Directly tested
Expectation communication: Performance expectations should be clearly communicated with employees at the beginning of the appraisal period.	Directly tested
Feedback discussion: Evaluation results should be fed back to (discussed with) employees, including strengths and weaknesses, clarifying priorities, etc., in addition to the appraisal.	Directly tested
Employee interpretations: Employees should be allowed to suggest interpretations of their performance before the evaluation is finalized.	Directly tested
Participative goals: Employee should be allowed to participate in the performance planning, goal setting, performance improvement, development, clarifying roles, etc., processes.	Directly tested

Table 2. (Continued).

Category/Practice	Support
Individual differences: Employee individual differences should be considered when interpreting feedback (e.g., job, tenure, level, culture, etc.).	Directly tested
Organizational vernacular: Evaluations should use the language of the organization (or written by those with organizational knowledge).	Professional support only
REVIEW AND DOCUMENTATION	
Calibrated results: Results should be calibrated across employees and organizational units to ensure consistency.	Theoretical support only
Managerial oversight: Evaluations should be reviewed with the next higher level of management to get input on performance, ensure the process is administered consistently, gain approval, etc.	Theoretical support only
Appeal mechanism: An appeal mechanism should be allowed for incumbents to raise concerns to a higher level of management or outside authority if needed.	Indirectly tested
Documented process: The PM process and results should be documented (e.g., ratings, dates, narrative comments, action plans, etc.), possibly including any data supporting the appraisal.	Professional support only
Process review: The PM process should be reviewed on some regular basis to determine if it is effective and to identify improvements, including analysing the data for rating errors, subgroup differences, etc.	Theoretical support only

and supported by top management (Appelbaum, Nadeau, & Cyr, 2008; DeNisi, 2011; DeNisi & Pritchard, 2006). PM practices are also strategic when they are linked internally to other practices within the overall HR system including compensation, promotion, termination, career development, etc. (Heneman & Gresham, 1998; Korsgaard & Roberson, 1995; Latham, Almost, Mann, & Moore, 2005). This category of practices has received some support from the literature as it includes one practice that has been directly tested, and one that is theoretically supported by the literature.

Sound content

The next element of the PM taxonomy focuses on sound content. The soundness of the content in the PM practices includes several elements. Subject matter experts, such as job incumbents or managers, should have input on the development of things like evaluations in order to ensure usability and acceptance (Roberts, 2002; Schweiger & Summers, 1994; Silverman & Wexley, 1984). Content should be based on a job analysis or shown to be job-related (Viswesvaran, Schmidt, & Ones, 2005; Werner & Bolino, 1997; Woehr, 1994). Practices should normally evaluate employees in terms of either the work itself (e.g., responsibilities, performance dimensions, etc.), employee attributes (e.g., skills, competencies, knowledge, dependability, motivation, etc.), outcomes (e.g., productivity, quality, etc.), or a combination thereof (Arvey et al., 1998; Banks et al., 1985; Bobko & Colella, 1994). All aspects of employee contributions should be included in addition to task performance, such as teamwork, citizenship, support for company culture, support for diversity, etc. (Allen & Rush, 1998; Arvey et al., 1998; Bernardin, Hagan, Kane, & Villanova, 1998; Catano, Darr, & Campbell, 2007). Evaluations should be based on observable job behaviours to the extent possible, as opposed to trait-oriented (Holley & Feild, 1977; Kraiger & Ford, 1985; Latham et al., 2005; O'Sullivan, 2009). Evaluations should be specific rather than global and sufficiently detailed (Pettijohn, Pettijohn, & d'Amico, 2001; Pulakos, 1984).

Moreover, objective performance data should be considered to the extent possible such as productivity, quality, profits, customer service, and so on (Kleiman & Durham, 1981; Miller, Kaspin, & Schuster, 1990; Najmi, Rigas, & Fan,

2005). Performance data should be obtained from multiple sources, such as 360-degree feedback (e.g., from peers, subordinates, customers), and should be collected and considered as appropriate, either formally (e.g., via survey) or informally (e.g., via oral input) (Appelbaum, Roy, & Gilliland, 2011; Arvey et al., 1998; Gilliland & Langdon, 1998; Hoffman et al., 2012). If feasible, multiple evaluators of employee performance should be employed (e.g., panel review) (Catano et al., 2007; Church, 1995). Finally, employee self-evaluations should be collected and considered as input to evaluations (Folger, Konovsky, & Cropanzano, 1992; Gilliland et al., 1998; Greenberg, 1986; Hillery & Wexley, 1974). This category of practices has received substantial support within the literature as it includes 14 practices that have been directly tested, and two that have been indirectly tested.

Meticulous ratings

The performance rating feedback provided to employees should be meticulously prepared such that it provides useful feedback, differentiates employees, and is understandable. The format of the rating scales (e.g., types, levels, etc.) should be tailored to distinguish between levels of performance (Tziner & Kopelman, 2002; Yun, Donahue, Dudley, & McFarland, 2005). Rating scales should be clearly defined (e.g., using definitions, anchors, or similar methodology) and understandable to managers and employees (Aslam & Sarwar, 2010; Athey & McIntyre, 1987; Bartol, Durham, & Poon, 2001). The rating process should be standardized (e.g., using forms, procedures, etc.) and reliable (Latham et al., 2005; MacDonald & Sulsky, 2009; Martin, Bartol, & Kehoe, 2000). Feedback should include both an absolute performance evaluation (e.g., compared to expectations) and a relative performance evaluation (e.g., compared to other employees) (Appelbaum et al., 2008; Blume, Baldwin, & Rubin, 2009; Catano et al., 2007). Ratings should adequately differentiate performance across employees by using ranking, a target distribution, or similar approach (Blume et al., 2009; Chattopadhayay & Ghosh, 2012; Church, 1995). Ratings should be supported by narrative comments that are adequately detailed and clearly written (e.g., to explain evaluation, give feedback, promote development, etc.) (Latham et al., 2005; Martin et al., 2000; Spinks, Wells, & Meche, 1999). This category of practices has received

substantial support within the literature as it includes four practices that have been directly tested, and two that have been indirectly tested.

Professional administration

The PM system should be administered with due care and professionalism. Ratings of performance should be made with consideration of potential biasing factors (e.g., types of job, business conditions, opportunity to perform, unexpected events, other constraints, etc.) (Avery, McKay, & Wilson, 2008; Banks et al., 1985). Reviewers should have the opportunity to frequently observe employee job performance or otherwise be knowledgeable of employee performance through other means (e.g., by monitoring output) (Bernardin, 1992; Borman, 1979). Employees should be compared with others doing the same or similar work (Church, 1995; Kline & Sulsky, 2009). Evaluators should be trained in administering the PM system (e.g., understanding the purpose, giving feedback, developing employees, avoiding ratings errors and bias, developing proper frame of reference, etc.) (Varma, Pichler, & Srinivas, 2005; Veglahn, 1993; Wang, Wong, & Kwong, 2010).

Individuals conducting evaluations as part of the PM system should be motivated and enabled with training, incentives, awareness of the social context, consideration of individual differences of the evaluators, and by other means (Burke, 1996; Curtis, Harvey, & Ravden, 2005; Giles, Findley, & Feild, 1997). In addition, evaluators should be given clear and specific instructions on procedures, including the correct completion of forms (Catano et al., 2007; Field & Holley, 1982). Evaluators should do evaluations at a time that is in close proximity to the time the results will be used for personnel decisions (Gilliland et al., 1998; Holley & Feild, 1977). Evaluations should not only be timely, but they should also be conducted routinely, usually on an annual basis (Landy, Barnes, & Murphy, 1978; Latham et al., 2005). There should be a mid-year or other intermediate review during the year to ensure progress is being made and to provide guidance. Ideally, feedback should be given on a regular, ongoing basis (Dobbins, Cardy, & Platz-Vieno, 1990; Folger et al., 1992). Throughout the year managers and employees should be encouraged to record performance-related information as input to evaluations (Gilliland et al., 1998; Kuvaas, 2011). To make it easier for users, the evaluations should be facilitated by user-friendly computer software to make it efficient and timely (Paladino, 2007; Payne, Horner, Boswell, Schroeder, & Stine-Cheyne, 2009). Administration of PM practices should be monitored by HR (Rees & Porter, 2004). Finally, the process should not be unduly burdensome in terms of time, costs, and so on (Catano et al., 2007; Grote, 2000). This category of practices has received some support from the literature as it includes six practices that have been directly tested, three practices that have been indirectly tested, one practice that has theoretical support within the literature, and three practices that have received professional support only.

Prospective development

The PM plan should include a focus not just on evaluations but also on employee development. Evaluations should be developmental (e.g., with indications on how to improve) in addition to evaluative (Bernardin, 1992; Bouskila-Yam & Kluger, 2011; Bretz et al., 1992). Performance reviews should be separate for development versus evaluation purposes if possible (e.g., separate meetings and forms, etc.) (DeNisi et al., 2006; Fletcher, 1995; Goldstein, 2001). PM practices should usually include a performance planning or goal-setting component (Latham et al., 2005). Additionally, PM practices should provide an opportunity to identify and eliminate obstacles and constraints to effective performance and development (Goldstein, 2001; Kleingeld, Van Tuijl, & Algera, 2004). The PM plan should usually include a discussion and possibly a plan for career development (Dorfman, Stephan, & Loveland, 1986; Fink & Longenecker, 1998). A detailed remedial performance improvement plan should be developed if serious deficiencies exist, with guidance from HR (Blume et al., 2009; Grote, 2000). The PM plan should evaluate the potential for higher-level positions if used as input to succession management (Cleveland, Murphy, & Williams, 1989; Fletcher, 1995; Nankervis & Compton, 2006). This category of practices is generally supported by the literature as it includes four practices that have been directly tested, two practices that have been indirectly tested, and one practice that has theoretical support within the literature. This category of practices has received substantial support within the literature with four practices that have been directly tested, two that have been indirectly tested, and one that has theoretical support only.

Rich communication

The PM system should include rich two-way communication. The policies, procedures, uses of the data, and other aspects of the process should be clearly communicated to employees (Martin & Bartol, 991; Nankervis et al., 2006; Reilly & McGourty, 1998). Performance expectations should be clearly communicated with employees at the beginning of the evaluation period (Appelbaum et al., 2011; Bobko & Colella, 1994). Evaluation results should be fed back to (discussed with) employees, including strengths and weaknesses (Appelbaum et al., 2008); Catano et al., 2007). Employees should be allowed to suggest interpretations of their performance before the evaluation is finalized (Grote, 2000; Kleingeld et al., 2004; Landy et al., 1978). Employees should also be allowed to participate in the performance planning, goal setting, performance improvement, and development processes (Bobko & Colella, 1994; Brown & Benson, 2005; Buchner, 2007; Chiang & Birtch, 2010; Dorfman et al., 1986; Giles et al., 1997). Individual differences between employees should be considered when interpreting feedback (e.g., job, tenure, level, etc.) (Motowidlo & Van Scotter, 1994; Pearce & Porter, 1986). Evaluations should use the language of the organization or be written by those with organizational knowledge (Brutus, 2010). This category of practices has received substantial support within the literature as it includes six practices that have been directly tested, two

that have been indirectly tested, and one that has received professional support only.

Review and documentation

The PM system should include review and documentation processes. Results should be calibrated across employees and organizational units to ensure consistency (Catano et al., 2007; Church, 1995). Employee evaluations should be reviewed with the next higher level of management to receive input on performance, ensure that the process is administered consistently, gain approval, and so on . An appeal mechanism should be allowed for incumbents to raise concerns to a higher level of management or an outside authority if needed (Folger et al., 1992). The process and results should be documented (e.g., ratings, dates, narrative comments, action plans, etc.), and should potentially include any data supporting the evaluation (Boice & Kleiner, 1997; Cleveland et al., 1989). The PM process should also be reviewed on a regular basis to determine if it is effective and to identify necessary improvements, including analysis of the data for rating errors, diversity related differences, and so on (Giles et al., 1997). This category of practices has received some support from the literature as it includes one practice that has been indirectly tested, three that are theoretically supported by the literature, and one that has received professional support only.

Integrating the taxonomy into a theoretical framework

The proposed theoretical model is depicted in Figure 1. We use this model to integrate the taxonomy of PM practices into a comprehensive theoretical model. On the left side of this figure are the categories of PM practices. The central path in this model is critical because it focuses attention on the core expected relationships that flow from practices, to employee behaviours, and, finally, to results. Recognizing that role theory indicates that employee behaviours can be either expected, laudable, or prohibited (Katz & Kahn, 1978), we identify three categories of role behaviours. Those three categories are represented in the box on employee behaviours. These three categories are expected to encompass all types of role behaviours that can be influenced by PM practices. The categories are (1) the expected behaviours In-Role, which include behaviours such as core task performance (Viswesvaran, 2001), (2) acceptable or laudable Extra-Role behaviours, which include individual or organizational citizenship behaviours, and (3) a new term, Contra-Role behaviours, which include undesirable conduct such as tardiness, absenteeism, dysfunctional voluntary turnover, theft, fraud, substance abuse, and other counterproductive behaviours (Johns, 2001; Sackett & DeVore, 2001). The term "contra-role" is used to provide clarification, symmetry, and consistency with the other two categories of behaviours. It emphasizes that these behaviours not only have a negative effect on productivity as is implied by the term "counterproductive" behaviours, but also other dimensions of performance.

In addition, Figure 1 contains three other boxes that represent Social Factors, Cognitive Factors, and Results. Social Factors reflect the body of historical research on the importance of interpersonal relationships, leader member exchange, social perceptions, national culture, organizational culture, and structural or political factors (Judge & Ferris, 1993; Ford, Kraiger, & Schechtman, 1986). Cognitive Factors reflect the body of historical PM research on cognitions and judgment, rater errors and accuracy, attitudinal or emotional reactions, and motivational factors (Bretz et al., 1992; Ferris, Munyon,
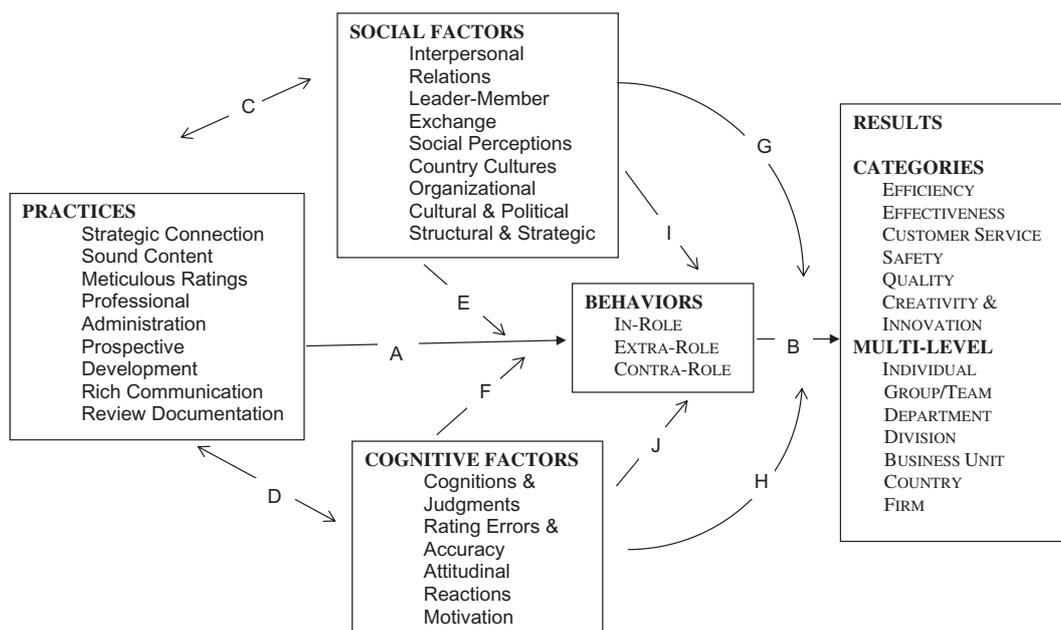

Figure 1. A direct linkage Practice → Behaviours → Results (PBR) model for performance evaluation research.

Basik, & Buckley, 2008). Results include several different factors each of which are defined here. Efficiency means the successful outcomes of PM practices given their costs in both time and money (Hoffman et al., 2012). Effectiveness means ability of PM practices to accomplish the desired goals (Hoffman et al., 2012. Quality means the absence of defects, reliability, etc. (Sinclair & Zairi, 1995; Soltani, 2005). Customer service means that customers' needs are met (Bernardin, 1992). Creativity and innovation means that something is both novel and appropriate for a particular use (Harrison & Rouse, 2015). Results include multi-level outcomes (e.g., individual, group, firm) in order to highlight the importance of studying PM practices at different levels as a method of closing the science-practice gap.

Main and moderator effects

Here, we describe the main, moderator, and mediator effects that are represented by the proposed theoretical model. We explain the differences between these types of effects and identify some unanswered hypothesized relationships that could guide future research in the field of employee PM. In the discussion section later in this paper, we provide examples of specific research propositions derived from this model.

Main effects are the phenomena that serve as the building blocks for more complex relationships. Main effects are represented in this model by arrows from one box to another. For example, the path from Practices to Behaviours is represented by an arrow and labelled Path A. Path A in this model indicates that there can be several main effect relationships from the categories of PM practices to the categories of employee behaviours. This represents the hypothetical main effects of multiple Practices on multiple Behaviours. This path represents the seven categories and 50 individual PM practices that could have direct effects on the three categories of behaviours. For example, the practice of recognizing all aspects of performance can have a direct effect on encouraging extra-role behaviours and teamwork (Allen et al., 1998; Johnson, 2001).

Similarly, Path B represents the main effects of multiple types of employee behaviours on the categories of outcomes and different levels of outcomes. Path B indicates that there are several main effect relationships between behaviours and multiple results or outcomes such as productivity, service, quality, and innovation (Campbell, McCloy, Oppler, & Sager, 1993). The model also indicates that results can be measured at various levels including individual, group or team, department, division, business unit, firm, or country. For example, the quality of employee customer service can affect customer perceptions of business unit service climate (Schneider, White, & Paul, 1998). Also, work facilitation and interdepartmental service can increase a business unit's climate for customer service (Schneider et al., 1998), but contra-role behaviours could reduce the level of quality or customer service.

In addition to this core critical path, we incorporate into this model other paths to both the cognitive and social factors research streams. Paths C and D are represented with bi-directional arrows indicating that the cause and effect relationships of these main effects can flow in either direction. For example, PM practices can influence social factors such as the culture of an organization. Well-aligned PM practices that support enhanced innovation may be capable of increasing the level of innovativeness in the corporate culture or climate (Bowen & Ostroff, 2004). Alternatively, country culture can influence the practices that are used in organizations. For example, in countries with Latin European cultures, where there is a higher value placed on self-actualization, it is more likely that PM practices would include employee involvement in setting objectives and appraisals used for potential or development (Posthuma et al., 2013).

PM practices can also influence cognitive factors such as employee reactions and motivations. For example, clear communication of expectations and a feedback discussion with employees should increase perceptions of procedural justice (Greenberg, 1986). Alternatively, cognitive factors can influence the choice of the practices used. For example, when evaluators perceive that a system is overly cumbersome and not valid, they are less likely to use good practices such as meticulous ratings and professional administration. Instead, they are likely to settle for more streamlined PM practices (Buckingham & Goodall, 2015).

Paths I and J represent the main effects of social factors and cognitive factors on employee behaviours. For example, a strong organizational culture will significantly influence employee behaviours (Bowen & Ostroff, 2004). As another example, cognitive factors may come into play when employees perceive higher levels of procedural justice; if procedural justice exists, they will be more likely to engage in positive extra-role behaviours (Moorman, 1991).

Moderator relationships tend to focus on more complex questions such as when or for whom these bivariate relationships hold true. Moderator relationships can identify two theoretically meaningful interaction patterns that are relevant to research on employee PM. The first interaction pattern is a synergistic or enhancing effect. For example, there could be positive improvements in employee behaviours when employees receive communication about their expected performance before the rating period (Path A; Bobko & Colella, 1994). Also, there can be a positive effect on employee behaviours when they work in a performance-oriented national culture (Path I. However, the interaction of this practice and national culture will work together synergistically to improve employee performance even further (Path E). That is, the positive effects of communication may be even greater in national cultures with less hierarchical orientation.

The second theoretically meaningful interaction pattern is a buffering effect. In this type of interaction effect, two main effects would have the opposite sign and one main effect weakens the other. For example, there can be a positive effect on employee extra-role behaviour from participating in goal setting (Path A), but also a negative effect of employee attitudes (e.g., negative affect) on extra-role behaviours (Path J). The negative affect would act as a buffer if it reduced the size of the positive effect of goal setting on extra-role behaviours (Path F). In other words, the positive impact of goal setting would not work as well for those individuals with negative affect (Grant, Parker, & Collins, 2009).

Mediator effects

Mediator effects are variables that explain the "how" or "why" of relationships between other variables (Baron & Kenny, 1986). Mediator effects are represented in this model by the sequence of arrows from Practices to Behaviours (Path A), and then from Behaviours to the Results as the outcome (Path B). The Behaviours are the mediators. For example, it is expected that certain kinds of practices such as multi-source feedback will have a positive impact on innovative change because they increase extra-role behaviours (Bracken & Rose, 2011). We have represented this mediation of behaviours effect in the centre of the model because we believe it should be the core focus.

A second mediator effect is represented by the path from Practices to Social Factors (Path C) and then from Social Factors to Behaviours (Path I). The Social Factors are the mediators. For example, it can be hypothesized that certain kinds of practices would influence the organizational culture (e.g., to increase the prevalence of an ethical workplace), and then that culture would account for a reduction in counter-productive behaviours such as fraud (Path I) (Bowen & Ostroff, 2004). A third mediation effect is represented by the path from practices to Cognitive Factors (Path D) and then from Cognitive Factors to Behaviours (Path J), where Cognitive Factors are the mediators. For example, an increase in the use of the practice of setting participative goals could increase the positive reactions to and acceptance of the feedback and thereby increase job satisfaction resulting in increased longevity (i.e., reduced dysfunctional employee turnover) which is a type of Contra-Role behaviour (Bobko & Colella, 1994).

Moderated-mediation effects are moderators that influence the relationships contained within a mediation model. Typically this means that moderators influence the size of the mediation effect. For example, there are two ways that Social Factors can influence the model. First, Social Factors can moderate the relationship between Practices and Behaviours (Path E). For example, a national culture that focuses on collectivism or Confucian values could reduce the positive impact that asking employees for a self-evaluation would have on employee behaviours. In such cultures, employees are less accustomed to engaging in self-promotion behaviours, but still show the same bias in self-evaluation (Yu & Murphy, 1993). Second, Social Factors can moderate the relationship between Behaviours and Results (Path G). For example, if an organization has created a corporate culture that focuses on innovation, then the positive impact that extra-role behaviours will have on actual innovations can be enhanced (Posthuma et al., 2013). The net impact of social factors on the mediating role of behaviours is a moderated mediation effect.

Likewise, there are also two ways that Cognitive Factors can influence the relationships in the model. First, Cognitive Factors can moderate the relationship between Practices and Behaviours (Path F). For example, a moderator effect can occur when the positive increase in extra-role behaviours that results from participation in the appraisal process (Path A) is enhanced by improved perceptions of the quality of the social relationship (Pichler, 2012). In turn, organizational commitment can mediate the relationship between these reactions

and citizenship behaviours because of an expectation for a continuing positive social exchange (Heslin & VandeWalle, 2011). Second, Cognitive Factors can influence the relationship between Behaviours and Results (Path H). For example, the negative effects of employee contra-role behaviours on productivity or quality of customer service could be exacerbated if the employee has a negative attitude, in part because of their dissatisfaction with the process.

Discussion

Theoretical implications

In this section, we explain how the taxonomy of PM practices and the PBR framework can be used to guide future research. First, we discuss how the taxonomy of practices can serve as a foundation for the identification of useful research propositions based on combinations and permutations of practices. Combinations of PM practices are analysed from the perspective of two criteria: efficiency and effectiveness. Permutations of PM practices are analysed from the perspective of functional interdependence and time dependence. Second, we analyse the interactions of practices with other elements in the PBR model to provide propositions for future research.

Combinations of practices for efficiency and effectiveness

Combinations of PM practices are subsets of practices in the taxonomy that can be chosen strategically, but are used without consideration of their sequential order. The identification of 50 practices in this taxonomy suggests many possible avenues for synergistic combinations to explore in future research.

However, not every combination makes sense for organizations. To determine when a combination is logical, we propose that combinations of practices should be considered in light of both their efficiency and effectiveness (Hoffman et al., 2012). Table 3 defines four types of combinations of practices based on the criteria of efficiency and effectiveness.

Table 4 presents a list of examples of research propositions that follow from this analysis. This is not an exhaustive list, but rather examples of propositions. The propositions are not stated as specific examples of combinations of PM practices, but instead they are stated as the reasons an organization might select a combination of this type based on the literature. This makes the propositions more generalizable for making specific predictions in different situations.

Type I. Low effectiveness and low efficiency

Poorly designed combinations of practices that are not based on validated research can be both ineffective because they do not motivate higher levels of performance and inefficient

Table 3. Combinations of PM practices.

		Effectiveness	
		Low	High
Efficiency	High	II	IV
	Low	I	III

Table 4. Research propositions for combinations of PM practices based on efficiency and effectiveness.

Type I. Low effectiveness and low efficiency
1. Bounded rationality: Organizations will rely on simplifying decision-making heuristics to determine the combinations of PM practices that they will use and these heuristics will reduce the efficiency and effectiveness of the PM system.
2. Irrational Escalation of Commitment: When organization decision makers will decide which PM practices to use, they will tend to invest more in practices they have previously chosen even when they have proven to be ineffective, leading to greater inefficiency.

Type II. High efficiency and low effectiveness
3. Avoidance of Negative Reactions. Because negative information tends to outweigh positive information, negative reactions to PM practices organizations will tend to eliminate them even though they may have counter-balancing positive benefits.

Type III: Low efficiency and high effectiveness
4. High stakes outcomes: In high stakes outcome situations (e.g., medical emergency jobs), organizations will use redundant PM practices to increase reliability.
5. Self-serving Interests: Decision makers will be more susceptible to choose PM practices that enhance their own job security in situations where the pressures for institutional legitimacy enable them to justify decisions that are less efficient, but effective.

Type IV. High efficiency and high effectiveness
6. Rational choice: Organizations that face greater competitive market pressures will be more likely to adopt combinations of evidence based PM practices that are both efficient and effective.

because they are overly cumbersome and costly for with very little benefits.

Proposition 1 is based on bounded rationality and suggests that because of the difficulty of understanding the positive effects of complex interactions of multiple PM practices, organizations will rely on simplifying decision-making heuristics such as imitation processes, political influences, and trends to decide which practices to use (Abrahamson, 1991; Johns, 1993). For example, organizations may adopt information system software because they see that others have adopted it or because of unusual features, even though it may not result in the intended benefits.

Proposition 2 is based on the concept of irrational escalation of commitment that can occur when decision makers will tend to invest more and more in the choice of practices that they have previously selected in order to avoid threats to their self-image from admitting they made a poor choice (Staw, 1976). This can result in progressively lower levels of efficiency and effectiveness because managers could continue to use inefficient or ineffective PM practices just because they chose the practices themselves.

Type II. High efficiency and low effectiveness

For some organizations, the perceived ineffectiveness of their PM system has driven them to strive for efficiency only through streamlining and eliminating practices (Buckingham & Goodall, 2015; Pulakos et al., 2015). In their quest for efficiency, these organizations may cut their practices to a bare minimum and thus achieve efficiency, but with uncertain or low levels of effectiveness (Buckingham & Goodall, 2015). For example, and organization could eliminate cumbersome paperwork involved by instituting cloud-based evaluations, but simultaneously eliminate reciprocal information sharing that could occur with a feedback discussion.

Organizations will have a tendency to eliminate PM practices that have negative user reactions (e.g., raters may dislike providing narrative feedback or providing low ratings) even though some of the eliminated practices may have had positive benefits to the organization (Buckingham & Goodall, 2015). This underscores the need to adopt practices based on evidence of the full range of outcomes, and not on a subset. Nevertheless, because negative information (e.g., critical comments about employee performance) tends to be weighted more heavily than positive information, organizations will choose to eliminate some practices based on negative user reactions, even if the benefits in terms of improved performance outweigh the negative user reactions (Ito, Larsen, Smith, & Cacioppo, 1998). Thus, Proposition 3 suggests that when organizations stop using effective PM practices, it can increase efficiency, but reduce effectiveness. For example, organizations could reduce the frequency of feedback to avoid negative reactions. Alternatively, highly efficient practices could result in positive user reactions that could induce organizations to use them, even though they are ineffective.

Type III. Low efficiency and high effectiveness

On the other hand, some organizations may implement PM practices that have greater effectiveness, but they do so at the expense of efficiency (Scanduto, Hunt, & Schmerling, 2015). Proposition 4 is an example of where this can occur. Redundant PM practices, although inefficient, will increase the likelihood that the organization can avoid contra-role behaviours *in situ*ations involving high stakes consequences (e.g., higher level executives). In this type of situation, performance effectiveness is critical. For example, when evaluating executives, organizations may be more likely to use both multi-source raters (supervisors and peers) and also multiple raters (e.g., multiple supervisors) in order to enhance the reliability of their ratings, and also evaluate them on outcomes as well as behaviours.

Proposition 5 states that self-serving interests may induce those who make decisions about the combinations of PM practices to add more practices that may lead to higher effectiveness but reduce efficiency. Transaction cost economics predicts that people will be opportunistic, and act in their own self-interest with guile (Williamson, 1981). This phenomenon will be more likely to occur in organizations that have less pressure to operate efficiently and more pressure to achieve institutional legitimacy (DiMaggio & Powell, 1983). In such situations, the pressure to demonstrate legitimacy will encourage those who would benefit from the use of more PM practices to act with guile to add more practices that will enhance their own job security. For example, an HR department in an organization might promote an inefficient PM process because it helps ensure their job security.

Moreover, organizations may use inefficient practices for many reasons including status quo bias, inertia, sunk costs, social influence, and risk aversion (Smither, 2015). The combined effects of these institutional and other influences will be the use of a greater number of PM practices but less efficiency. Some of the types of organizations where this would be more likely to occur are public sector or government organizations or in planned economies and state-owned enterprises (in some countries outside the U.S.). For example, some cumbersome civil service PM practices have

been criticized for existing due to these reasons (Johns, 1993; Rhodes et al., 2012; Roberts, 2002; Selden & Sowa, 2011).

Type IV. High efficiency and high effectiveness

An important goal for research is to find combinations of practices that will help organizations achieve both efficiency and effectiveness (Buckingham & Goodall, 2015; Darling, 2013; Pulakos et al., 2015). In this way, researchers can close the gap with practice. Proposition 6 suggests that organizations that face market pressures to be more competitive will be more likely to adopt a combination of PM practices that is both efficient and effective.

This contextual pressure on the organization will make it more likely that they will seek to balance the costs of practices against the expected benefits. An organization illustrating this proposition will be induced to add more practices that will enhance employee understanding of their roles (reducing role ambiguity and increasing role clarity) in order to achieve higher levels of in-role behaviours. Moreover, they may not only give clear feedback but also increase feedback frequency and work to ensure that the feedback that is provided is aligned with the organization's strategy. However, as they add PM practices, they will also be examining different combinations of practices to look for trade-offs between costs and benefits. They will tend to adopt the most effective and efficient practices as a baseline and then consider adding additional practices if it is perceived that they will have additional benefits. Eventually this will result in an equilibrium level of practices at which point the addition of other PM practices will not be justified by the incremental cost of their adoption (Buckingham & Goodall, 2015; Darling, 2013; Pulakos et al., 2015).

Permutations of practices based on time dependency and functional interdependence

Permutations of PM practices are sets of practices that are placed in different sequences. Prior research has suggested that permutations can be important, such as the sequencing of positive and negative information (Stone, Gueutal, & Mcintosh, 1984). However, the research literature has tended to ignore the potential benefits that sequencing of practices may afford. To determine when a permutation is logical, we propose that there are two important facets of permutations: time dependency and functional interdependence. Time dependent practices need to occur in a specific sequence. Functionally interdependent practices need to occur together with other practices in order to function properly.

Some sequences of practices are time-dependent. Logically one practice should occur before another. For example, information needs to be collected before it can be evaluated and shared with employees. Yet, a number of practices are not time-dependent and can thus be placed in alternative sequences. For example, a common recommended practice is to have employees do a self-evaluation before they receive their formal performance review (Atwater, Ostroff, Yamarino, & Fleenor, 1998; Bernardin et al., 1998), but the opposite order is conceivable such as having employees do a self-evaluation after they have received initial feedback about their productivity.

Functional interdependence among practices occurs when one practice is necessary for another to work well. For example, a functionally interdependent sequence could occur if an organization wants to focus on behavioural control of performance. They begin a performance review interview with feedback about prior performance. This causes a priming effect that sets the stage for employers to emphasize that the primary purpose of the review session is behaviours and performance, thereby enhancing the function of the PM process. However, if the organization wants to focus more on growth and career development, it could begin the performance review interview with practices that focus on prospective development. The combined effects of the degree of time dependency and the functionality of permutations lead to the four possibilities defined in Table 5.

The following discussion provides the rationale for illustrative research propositions that are derived from the juxtaposition of high or low levels of functional interdependence and time dependence. Those propositions appear in Table 6. The propositions in this case are examples of PM practices that illustrate each type. We observe that many of these propositions suggest that PM practices can be both functionally interdependent and highly time dependent.

Type A. High functional interdependence and high time dependence

Proposition 1 is based on the idea that job analyses should be performed before designing employee performance evaluation competencies, employee selection competencies, and training programme evaluation learning competencies. In this way, the competencies measured by these different HR practices can be made more similar. This goes beyond the idea of horizontal fit of HR practices with strategy. Rather, it proposes that the content of those practices, such as the competencies measured by different practices, should be aligned so that the different practices reinforce the clarity of role expectations for employees (Campion et al., 2011; Delery & Doty, 1996; Gerhart, 2007). Job analysis in this instance is both time dependent (it must occur in advance) and functionally interdependent (it creates the content for those latter systems).

Propositions 2 is based on the premise that performance improvement plans (PIPs) will be more effective if they are designed to promptly, repeatedly, and clearly target specific contra-role behaviours and in-role behaviours that are at low levels. The temporal proximity of the PIP will emphasize and clarify role expectations for employees. This will be better than waiting until a regular (e.g., annual) performance review because

Table 5. Permutations of PM practices.

		Functional Interdependence	
		High	Low
Time Dependent	High	A	C
	Low	B	D

Table 6. Research propositions for permutations of PM practices based on time dependency and functional interdependence.

Type A. High functional interdependence and high time dependency

1. Job analyses that are designed to create similar competencies at the same time for employee selection, training programme assessment, and employee performance evaluation will be more effective in enhancing in-role behaviours.
2. Performance improvement plans (PIPs) that are conducted soon after performance deficiencies occur will be more effective at reducing contra-role behaviours than those conducted during a later regular review time.
3. There will be an optimal sequencing of the presentation of multi-source feedback to employees that will be most effective at increasing user reactions and motivation to engage in appropriate role behaviours in the future. That sequence will be begin with lower levels (e.g., subordinates), then peers, and then superiors.

Type B. High functional interdependence and low time dependency

4. The positive effect of the use of multiple sources for performance evaluation will be greater for retrospective ratings because there will be less memory loss with multiple raters. Thus, time dependency is reduced.
5. The greater the standardization of the process that is used to create idiosyncratic goals for employees, the greater will be the perceived fairness of those goals by the employee and others; and this will result in higher levels of extra-role and lower levels of contra-role behaviours.

Type C. Low Functional interdependence and high time dependency

6. PM practices can reduce the goal conflict between developing employees for career advancement and improving their current performance by separating them in time, and the result will be improved results for the organization.

Type D. Low functional interdependency and low time dependency

7. Some PM practices such as comparison similarity (i.e., to other workers) can be relatively independent from other practices such as the use of narrative comments and the order of use of these practices will not substantially influence user reactions or increase employee role performance.
8. Some PM practices such as evaluations for career development and promotability potential can have low functional interdependence with other practices such as the use of user friendly software. Also, they can be implemented in different sequences without necessarily having an effect on user reaction or role performance.

it will enable the employee to correct their misconduct immediately. This will enhance employee understanding and realization of the importance of the differences between acceptable in-role and contra-role behaviours (McConnell, 2003). Once again, PIPs are both time dependent and functionally interdependent.

Proposition 3 recognizes that providing employees with performance feedback from different sources (subordinates, peers, and superiors) can occur either simultaneously or in sequence. It is proposed that providing employees with feedback from subordinates, then peers, and then superiors will be the optimal sequence because the employee will be able to see how the perceptions of their performance changes with increases in organizational level and perhaps that the higher levels of feedback are justified by lower levels.

Type B. High functional interdependence and low time dependence

Proposition 4 recognizes that as time elapses memories will fade, but also that multiple sources of data can somewhat reduce the errors of recollection. Thus, using multiple sources is functionally interdependent, but not absolutely time dependent because it will still reduce memory effects compared to a single rater even if not collected immediately in time.

Proposition 5 recognizes that when employees are given unique or idiosyncratic performance goals that are different from other employees, other employees could have a tendency to question the fairness of those goals. However, the perceived fairness will be enhanced with the use of standardized PM process because it will augment perceived procedural justice, thereby increasing the likelihood that others will engage in more extra-role behaviours and fewer contra-role behaviours (Greenberg, Roberge, Ho, & Rousseau, 2004).

Type C. Low functional interdependence and high time dependence

Proposition 6 recognizes that the activities that will help employees prepare for career advancement may take them away from their current job duties, resulting in goal conflict. However, separating discussions about these two goals to different times will tend to reduce this conflict. Separating the discussions on career advancement from discussions on performance is time dependent (by definition) and separating them makes them functionally independent (which reduces conflict).

Type D. Low functional interdependence and low time dependence

Proposition 7 recognizes that practices such as comparison similarity (i.e., to other workers) can be relatively independent from other practices and the order in which they are used will not substantially influence user reactions or increase role performance. For example, the use of comparison similarity can occur with our without the use of narrative feedback, and the narrative comments can be generated either before or after workers are compared to others.

Proposition 8 recognizes that PM practices such as employee evaluations for career development and promotability potential can have low functional interdependence with other practices such the use of user-friendly software. Also they can implemented in a different sequences without necessarily having an effect on user reaction or role performance. Of course, it is possible that there could be an additive positive effect because employees react positively to a focus on future career development and to efficient software.

Research propositions based on relationships between factors in the PBR model

In addition to considering the efficiency and effectiveness as well as the possible combinations and permutations of practices as explained above, researchers can use this taxonomy to study the influences the interactions among sets of PM practices with social and cognitive moderators and mediators that will influence behaviours and results. Towards this end, we highlight and summarize several potential examples of propositions for future research in Table 7. These propositions illustrate the usefulness of the taxonomy by following the structure of the major categories in the taxonomy. We emphasize implications for improving employee reactions, given the fundamental dilemma of negative employee reactions discussed earlier in the paper.

Table 7. Example research propositions based on the performance management model.

Strategic connection

1. PM Practices Aligned with Organizational Culture Increase Effectiveness. A PM process that is well aligned with the organizational culture will be more effective in eliciting the desired in-role behaviours. As a simple example, if the organization has an innovative culture, then that should be included in the PM criteria.
2. PM Practices Aligned with National Culture Increase Effectiveness. A PM process that connects with a country's culture will be more effective. For example, in Asian cultures, enhancing the social face of the ratee during the rating process could increase the likelihood that constructive but critical feedback would be accepted and used to improve extra-role behaviours.

Sound content

3. Peer Ratings in Flat Organizations Increase Acceptance. The use of peer ratings will be more appropriate and accepted in a flat organizational structure where there are more self-managed teams. In such contexts, peer input to PM is more logical because the employees are managing themselves and are the best judges of their peers' performance. Alignment of organizational structure with practices can enhance the positive reactions to practices and increase the level of in-role and extra-role behaviours.

Meticulous ratings

4. Rating Comparisons Reduce Rating Distribution Errors. Specific evaluation practices such as using relative (rankings) as well as absolute (ratings) and using a managed rating distribution can compensate for judgment errors such as skew and leniency so commonly observed in PM systems.

Professional administration

5. Professionally Administered PM Practices will increase PM effectiveness for Multinational Enterprises (MNEs). MNEs can enhance effectiveness if they find ways to resolve the dilemma of the desire to achieve efficiency through professional administration such as global standardization of PM processes, while also enabling useful adaptations to local country cultures. The result will be more desired behaviours and higher levels of performance.

Prospective development

6. Adapt Development Focus to Context to Increase Acceptance and Effectiveness. Prospective development must also take the organizational culture and structure into account. For example, the organizational culture may constrain performance and the structure may limit promotion opportunities. In this context, too much emphasis on development when there are limited opportunities could lead to perceived injustice and more contra-role behaviours.
7. Matching Degree of Developmental Focus to National Culture will Enhance Outcomes. Some cultures focus more on survival and therefore discussions about current performance will be more salient. Other cultures focus more on self-expression. PM practices that focus on development will be more effective in self-expression cultures.

Rich communication

8. PM Practices can Enhance Leader-Member Exchange. Practices like rich communication and prospective development can compensate for low leader-member exchange. Such practices help ensure acceptance when high trust cannot be guaranteed based on the relationship with the manager alone. This will increase extra-role behaviours.
9. More Rich Communication can Overcome Cognitive Limitations. Rich communication can reduce cognitive limitations by increasing the amount of information on performance considered and allowing employees to provide input to the interpretation of performance results. This will enhance user reactions and motivation.

Review and documentation

10. Reviews of Practices Correct Errors, Clarify Expectations, and Increase Motivation. Several of the specific aspects of the review process should reduce rating errors. For example, calibrated results and managerial oversight should reduce skew and leniency.
11. Oversight and Appeals Can Improve Reactions. Managerial oversight of the process and the existence of an appeal mechanism should improve employee reactions to the process because they enhance procedural justice. This may also increase extra-role behaviours and reducing contra-role behaviours because of their link to procedural justice.

Strategic connection

The content of the PM practices should fit the design of the organization. For example, organizations with a mass-market low-cost strategy with few hierarchical levels may focus on efficiency and therefore choose a combination of just a few PM practices. On the other hand, a better fit for larger more bureaucratic organizations with multiple hierarchical levels may be focused more on effectiveness, and therefore that type of organization will tend to choose a combination of many practices to make up their PM system. Propositions 1, and 2 in Table 7 offer more examples of the use of the PBR model to identify intriguing research questions related to strategic connection involving alignment with country culture and organizational culture.

Sound content

Research on sound content should focus on organizational design and national culture as moderators of the effectiveness of multi-source feedback (Ng, Koh, Ang, Kennedy, & Chang, 2011), as well as the need to focus on observable behaviours. Proposition 3 in Table 7 follows this line of reasoning.

Meticulous ratings

Research on rating meticulousness should focus on how clear criteria can reduce cognitive errors by raters and also clarify role expectations for employees leading to improved user reactions, more extra-role behaviours, and higher performance outcomes. This effect may be enhanced in cultures in which social comparisons are more important. Proposition 4 in Table 7 provides a specific example.

Professional administration

Research on professional administration should focus on how improved processes will enhance user reactions that lead to greater motivation, improved behaviour, and enhanced performance aligned with role expectations. This line of research can help to overcome cognitive limitations of users and perhaps assist in adaptations to local cultures, along with other benefits. Proposition 5 in Table 7 provides a specific example.

Prospective development

Research on prospective development should focus on the potential to refocus ratee reactions away from past performance and towards future potential. This research should also address situations where promotional opportunities in organizations may be limited. Moreover, greater focus on development is likely to have a synergistic effect with national cultures emphasizing self-expression versus survival (Inglehart & Welzel, 2005). Propositions 6 and 7 in Table 7 give specific examples.

Rich communication

Research on rich communication should focus on the extent to which communication richness in PM practices can compensate for other factors such as low levels of leader member exchange and the cognitive limitations inherent in the rating process. Propositions 8 and 9 in Table 7 provide examples.

Review and documentation

Research on this topic should focus on the extent to which review and documentation processes can effectively reduce rating errors such as leniency and thereby add clarity to employee perceptions of the role expectations. This will also enhance employee's expectancies that higher in-role performance will result in higher rewards. Managerial oversight and appeals will enhance justice perceptions leading to more extra-role behaviours, increasing creativity, and performance. Propositions 10 and 11 in Table 7 provide specific examples.

Practical implications

An important problem confronting many managers today is that there is a high degree of dissatisfaction with their PM systems (Pulakos et al., 2015). The taxonomy presented in this paper provides practitioners with a menu of PM practices from which they can choose satisfactory practices that will enable them to improve multiple dimensions of performance. These are not minimum expectations or required industry standards, but instead are possible ideal standards that well-run organizations might aspire to achieve. They might be considered "Best Practices" in that sense.

It is not expected that an organization will implement all of these practices, and not using one or more of these practices does not indicate a fault within the organization's processes. Sometimes PM practices are not applicable, not necessary, too expensive, or discretionary (Buckingham & Goodall, 2015). Nevertheless, an advantage of this taxonomy is that it cogently presents the many possible combinations and permutations of practices for consideration.

The key to effective PM will be for practitioners to choose the combination and permutation of practices that not only best fits their organization strategy and is effective in improving performance, but is also efficient, and has functionality that does not negatively impact user reactions.

In addition, consultants and advisors can use this taxonomy as a best practices checklist when reviewing the practices their organizations are currently implementing to determine areas where improvements can be made through carefully designed PM interventions. Lastly, when evaluating a business for possible acquisition, shareholders expect a due diligence examination of the practices of an organization before that business is acquired. The taxonomy presented here can serve as a guide or standard to evaluate the quality of an organization's PM practices.

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