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Does alignment elicit competency-based HRM? A systematic review**

Internationally, human resource practice is committed to competency-based HRM. HR practitioners and management consultants expect the outcomes of competency-based HRM to include improved employee and organizational performance. However, research indicates that a commitment to the use of competency-based HRM does not automatically guarantee these outcomes. Therefore, HR practitioners have called for academic work to enhance our understanding of the process of effective competency-based HRM. This paper addresses this call by systematically reviewing the existing body of evidence. The conducted systematic review indicated that the effectiveness of competency-based HR depends on the degree of several types of alignment. More specifically, we first identified four crucial types of alignment in this process: (1) vertical alignment, (2) internal alignment, (3) alignment of line managers, and (4) alignment of employees. Subsequently, based on these drivers of effectiveness and drawing from the HRM literature, we developed a process model of competency-based HRM. This process model interlinks the identified types of alignment and acknowledges the conditions in which this process occurs.

Key words: **competency-based HRM, vertical alignment, internal alignment, alignment of line managers, alignment of employees, process model** (JEL: J24, M54)

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Introduction

Competency-based HRM (CHRM) has become a part of human resource management since the 1990s (Athey & Orth, 1999; Mulder & Collins, 2007) and entails the use of competency models as the foundation of multiple HRM practices, such as recruitment, selection, training and development, appraisal and remuneration (e.g., Sparrow, 2002). Management consultants advocate CHRM as an important way to address future HR challenges, such as diversity, aging, and knowledge management (Dubois et al., 2004; Spencer & Spencer, 1993). They argue that CHRM would address the call of the Harvard model of HRM for more vertical and internal alignment in HRM practice (Beer et al., 1984). Moreover, the desired consistency and coherence resulting from these types of alignment are supposed to increase employee and organizational performance (Sparrow, 2002). Given this presumed link with performance and the fact that CHRM is expected to gain importance in the future, HRM practitioners have called for further academic work to inform their future CHRM practices (e.g., Nunes et al., 2007; Op de Beeck & Hondeghem, 2009).

However, CHRM is not a universal panacea and blindly adopting it is no guarantee for success. Although management consultants and HRM practitioners are often committed to using CHRM, research indicates that individual and organizational performance is not assured (e.g., Capaldo et al., 2006; Van der Meer & Toonen, 2005, Horton 2000). This finding mirrors the gap between intended and implemented HRM that has recently been stressed in the broader HRM literature (Decramer et al., 2012; Wright & Nishii, 2007; Boxall et al., 2011). This gap is problematic since poor implementation is not only a recipe for a failing CHRM but may even result in a damaged HRM reputation and employee resentment for future HRM initiatives (cfr. Reichers et al., 1997). Building on the process model of HRM (Nishii & Wright, 2008), we argue that this failure to reap the potential benefits of CHRM often roots in the way CHRM is implemented and perceived by employees. Accordingly, our study focuses on the CHRM process elements which induce effectiveness. The question that we address pertains to *the process in which* CHRM can be effective. We conducted a systematic review of articles that zooms in on this process.

The specific contribution of this paper lies in developing a comprehensive process model of CHRM which sheds a light on the determinants of process effectiveness. To this end, (1) we build on the theoretical framework regarding intended, implemented and perceived HRM in the process model of HRM (Nishii & Wright, 2008), and (2) we provide a systematic review on the process in which CHRM can be effective. This systematic review enabled us to discover two types of alignment in addition to vertical alignment and internal alignment. These types of alignments can be regarded as essential process effectiveness indicators of CHRM.

Competencies, competency-based HRM and the process model of HRM

In this section, we clarify the boundaries of competencies and CHRM, and provide the theoretical framework for our study. As competency is a multifaceted concept, it is important to define and delineated the concept, and to specify its meaning within the context of this study.

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Competency differs in meaning at the organizational level and the individual level. At the organizational level, strategic management scholars are concerned with 'core competencies'. Both in the resource based view (Barney, 1991) and in theory on core competence management (Prahalad & Hamel, 1990), competencies are conceptualized as the collective learning, skills and technologies that can provide the organization with a competitive advantage. Building on core competence theory and resource based view theory (Barney, 1991), Wright et al. (1994) proposed that an organization's human resources can form a core competence, and thus generate a sustained competitive advantage, if they are valuable, rare, inimitable and non-substitutable. Consistent with this proposition, core competencies are also incorporated as a concept in CHRM. Although competencies at the individual level differ from core competencies, the HRM department is involved in managing both types of competencies at an operational level (Bergenhenegouwen et al., 1997). The behavioral signals in competency models grasp the organization's competency needs and strategic competency direction as formulated in core competencies in the strategic plan (Lindgren, 2004). However, it should be noted that the use of the concept of core competence in CHRM often deviates from the strategic management approach and rather refers to values that are required from the entire personnel (Op de Beeck & Hondeghem, 2009).

At the individual level, there originally was a distinction between the US approach and the UK approach. The US approach regarded 'competency' as the behavioral and underlying characteristics of an individual to perform in a superior way (Boyatzis, 1982; Spencer & Spencer, 1993; White, 1959). This approach signified a move from intelligence to competency as predictor for superior performance (McLelland, 1973). The UK approach regarded 'competence' as the ability to perform the activities within an occupation. This approach entailed a system of national vocational qualifications as a reaction to the challenges of a globalizing economy (Fletcher, 1997). The US and the UK approach were complementary which resulted in a multidimensional definition of individual-level competencies as from the late nineties. Since then, competencies are seen as skills, knowledge, attitudes, and values which lead to performance (Le Diest & Winterton, 2005). It are these competencies that are entailed as required competencies in the competency models of CHRM (Cardy & Selvarajan, 2006).

While job descriptions focus on "what" is required for effective performance, competency models focus on "how" effective performance can be achieved. A competency model specifies a maximum of 10 to 20 competency requirements per person (Hollenbeck et al., 2006). The competency model is applicable to individual employees within a job group (Shippmann et al., 2000). In addition, there may also be competencies in the model that are applicable to broader levels in the organization such as the team, or the entire organization (Le Diest & Winterton, 2005). Each competency of the competency model is written out in detail in the organization-specific competency dictionary. This dictionary entails a detailed, behaviorally anchored description of the competencies that are necessary to ensure effective performance. This description often includes different levels of excellence that range from beginner to expert levels (Hondeghem & Vandermeulen, 2000). By using competency models as the corner stone of several HRM practices, CHRM brings consistence and coherence to the behavioural signals. This would be linked with employee outcomes such as job perfor-

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mance and organizational outcomes such as competitiveness (Cardy & Selvarajan, 2006; Sparrow, 2002).

Because the concept of CHRM is central in our review, we established the boundaries of the concept of CHRM at the outset of our review. CHRM regards an HRM system which entails the use of competency models as the foundation for recruitment and selection, training and development, performance appraisal, remuneration, and other HRM processes (e.g., Athey & Orth, 1999; Horton, 2002). These processes seek to close the gap between the competency requirements that are included in the competency models and the actual competencies that employees demonstrate. The implementation of competency models in HRM practices generates a shift in focus from job descriptions to the manner in which employees function in their jobs. This change implies a more individual-oriented approach that differs from traditional HRM approaches.

Literature on competencies has been criticized for not being explicit on the followed perspective. Basically two perspectives prevail in this literature stream (Garavan & McGuire, 2001). By following a literature stream that advocates the fit between strategic objectives and required competencies, the literature on competencies takes on a utilitarian instrumentalist perspective of management. The basic idea is that the rational use of competencies will ultimately lead to increased competitive advantage (Sandberg, 2000). This perspective is opposed to the liberating and empowering perspective of competencies that is based on developmental humanism. The central assumption of this line of research is that employees will actively pursue organizational goals when they are provided with power, self-control and self-regulation of their competencies. This perspective can be found in the literature on workplace learning (Garavan & McGuire, 2001). Since CHRM can be expected to be covered in management literature and in workplace learning literature, this review incorporates both of these perspectives.

In order to deal with our research question of the process in which CHRM can be effective, we build on the process model of HRM to increase our insights into the process in which CHRM may lead to functional employee and organizational outcomes. This model proposes a linkage of (1) intended HRM practices, which lead to (2) actual HRM practices, which in turn affect (3) perceived HRM practices, which result in outcomes that include (4) employee reactions and (5) organizational performance (Nishii & Wright, 2008; Wright & Nishii, 2013). This linkage complements existing recent models by illuminating the process in which HRM leads to performance. Thus, this model has been cited as one of the most elaborate models (Boxall et al., 2011). The relevance of this model to HRM literature is reflected in the large amount of citations for the working paper that first presented this model (Wright & Nishii, 2007). The separate box for actual HRM practices is consistent with the need for engaging line managers in managing human resources (e.g., Schuler & Jackson, 2005). The separate box for perceived HRM practices reflects a recognized need to consider employee perceptions of HRM (e.g., Whitener, 2001). Since CHRM is an application of HRM (Athey & Orth, 2001), this model can serve as a theoretical framework for our systematic review. A first assumption in this model is that HRM practices are developed at the job group (Wright & Nishii,

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2007). This is consistent with the common practice in CHRM to link competency models with required competencies to the jobs within the organization (Le Diest & Winterton, 2005). Second, unlike in some other process models of HRM (e.g., Guest, 1997), business strategy is not addressed in a separate box that influences HRM in the process model of HRM. Nevertheless, Wright & Nishii (2007) acknowledge that strategy plays an important role in the development of the intended HRM practices. In line with their assumptions, the link of CHRM with strategy will be regarded as intended CHRM. Third, consistent with several models of HRM (e.g., Guest 1997; Way & Johnson, 2006), the model starts from a unitarist perspective tying individual goals and behaviour to organizational goals that are incorporated in intended HRM. In other words, unlike the Harvard model of HRM (Beer et al., 1984), it does not acknowledge the impact of diverse stakeholders on shaping the intended HRM. Nevertheless, the model builds on behavioural and communication theories such as attribution theory to assume that employee needs may differ from those of the organization which may affect their perceptions and evaluations of HRM (Wright & Nishii, 2007).

Methodology

After clarifying our conception of CHRM and providing a theoretical framework for the study, we reviewed the evidence base pertaining to the process in which CHRM can be effective. We applied a systematic approach in reviewing the existing evidence base in the academic literature.

Systematic search and selection

We conducted the search in Business Source Premier/Ebscohost, Wiley Interscience, and the Web of Science/Social Science Citation Index in peer-reviewed journals that were published between January 1990 and August 2010. There was no a priori established list of journals. This search covered the journals that Boselie et al. (2005) used to review the HRM-performance relationship because these journals are indexed on these search engines. Examples are the major international HRM journals (e.g., *International Journal of Human Resource Management* and *Personnel Review*) and general management journals (e.g., *Academy of Management Journal*, *Journal of Management, MIS Quarterly,* and *British Journal of Management*). Additionally, we covered HRM and management journals that focus on specific sectors (e.g., *Public Administration*). Seven combinations of search terms were used: "competenc*" AND (1) "model" (Mansfield, 1996), (2) "framework" (Briscoe & Hall, 1999), (3) "manag*" (Vakola et al., 2007), (4) "HR" (Capaldo et al., 2006), (5) "develop*" (Bergenhenegouwen et al., 1997), (6) "organisation" (Heffernan & Flood, 2000), and (7) "method" (Athey & Orth, 1999).

As a result, 5,023 papers were imported into Endnote, a bibliography management tool. Subsequently, we read the titles and the abstracts of these articles to refine the selection. The inclusion criteria were (1) the use of a competency model as a link between multiple HRM practices based on the established boundaries of CHRM (e.g., Athey & Orth, 1999; Horton, 2002) and (2) the process in which CHRM is effective. At the conclusion of our systematic search, a total of *54 articles*

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that were consistent with these inclusion criteria were selected. All these articles address aspects of the process in which CHRM is effective. Among these articles, 21 papers offer direct evidence pertaining to the reviewed process, and 33 articles present indirect evidence. When using the term "direct evidence," we refer to articles in which the process between CHRM and its outcomes is the direct scope. This scope is typically clear in an article's methodology or introduction. When using the term "indirect evidence," we refer to articles in which this is not the direct scope in the methodology section. Indirect evidence is primarily found in articles pertaining to competency models. As an indirect effect of conducting research on competency models, scholars contribute to the academic knowledge of CHRM and its outcomes (e.g., Capaldo et al., 2006).

Data abstraction

Before we discuss the findings of the review, we must first clarify our analytical approach. The existing research pertaining to CHRM and its outcomes primarily employs exploratory analysis methods (90%). We first classified the data within the categories of (1) intended HRM, (2) actual HRM, (3) perceived HRM, and (4) individual-level or organizational-level outcomes. Second, within these categories our analysis applied an inductive, interpretative approach to summarize the existing research. This approach involved applying categorical codes to the content of the research and aggregating these codes to a higher level of abstraction (Eisenhardt & Graebner, 2007; Harden & Thomas, 2005). For comprehensive management topics, this approach is often more appropriate than meta-analysis because of the variety of dependent variables that are involved (Tranfield et al., 2003).

The inductive abstraction process focused on finding an answer to the research question pertaining to *the process in which* CHRM can be effective. This involved two stages. In the first stage, sentences discussing this process were literally copied into an Excel file. This stage resulted in 239 fields with literal quotations. In the second stage, we used an inductive, iterative methodology for coding textual data. Cyclical rereading and qualitative content analysis assisted us in extracting and summarizing the relevant information on the process of effective CHRM. Similar information was combined into four main categories. These categories concern types of alignment in the process of effective CHRM (i.e. vertical alignment, internal alignment, alignment of line managers, and alignment of employees). In Table 1, we provide some examples of quotes that led us to identify four types of alignment in the categories of the process model of HRM.

The coding process was conscientiously conducted by the first author. As part of the quality assurance process, 100 random selected fields with literal quotes were passed to one of the co-authors. He appropriately assigned these quotes to the developed codes.

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Table 1: Examples of literal quotes that were categorized into four types of alignment in the process model of competency-based HRM (CHRM)

Intended CHRM	**Vertical alignment**	'*Competencies can be used for translating strategy into job-related and individual skills and behaviours … in support for change.*' (Vakola et al., 2007: 261)
		'Vertically, competency management might be a tool to delineate individual and organisational competencies from the mission and strategy of the organisation.' (Hondeghem & Vandermeulen, 2000: 345)
	Internal alignment	*'This integration is important in the sence that the data received from each function within the HR system (ie. performance management, training and development, compensation, and so on) will be an input for another part of the HR system.*' (Özçelik & Ferman, 2006: 86)
		'Competencies provide a common language across HR functions; therefore, they provide a natural foundation for integrating these functions.' (Rodriguez et al., 2002: 311)
Implemented CHRM	**Alignment of line managers**	*'The outcome and value added of line management remains to create the conditions in which the competencies can be fully put to work*' (Godbout, 2000: 82)
		'For human resource experts to work with competency management, managers have to support and stimulate the use of competency management.' (Heinsman et al., 2006: 303)
Perceived CHRM	**Alignment of employees**	*'Many interviewees said that they found in the competency model a reference framework that could serve as a focal point and rulebook for initiatives and decision making in the frontline of customer interaction and day-to-day decision making.*' (Vakola et al., 2007: 269)
		'Competency models can link an individual's interest in a 'boundaryless career' to the identified competencies within the firm' (Rothwell & Lindholm, 1999: 101)

Findings:
Four types of alignment in the process model of competency-based HRM

Figure 1 outlines the model of the process in which CHRM can be effective that results from the systematic review. In this process model, four types of alignment for effective CHRM are connected to the process model of HRM that was presented by Wright and Nishii (2007; 2008). Based on the inductive data abstraction within the

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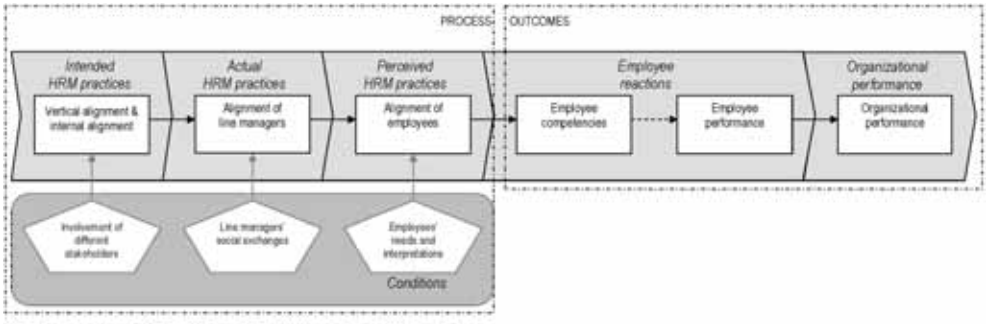
categories of the process model of HRM, four types of alignment were identified as essential for understanding the process in which CHRM may be effective. We outline the model in greater detail below.

Figure 1: A process model of competency-based HRM that is linked to the process model of HRM by Wright and Nishii (2007; 2008)



With regard to our choice of labeling for the first two types of alignment, the inductive process of literal quotes from 36 articles that were classified in the category of 'intended CHRM' (see table 1) lead to two existing concepts from the HRM literature (i.e. vertical alignment and internal alignment). For the subsequent two alignment forms, it was necessary to assign a new label since we could not match the findings to existing concepts in the HRM literature. On the one hand, the literal quotes from 20 articles that were classified below "implemented CHRM" were abstracted to the label "alignment of line managers". On the other hand, the literal quotes from 27 articles that were classified below "perceived CHRM" were abstracted to the label "alignment of employees".

The process model in the HRM literature (Wright & Nishii, 2007; 2008) served as a lens to increase our understanding of the process in which CHRM may be effective. We suggest that the types of the alignment of CHRM are linked to one another in a causal process. First, competency models serve as links between organizational strategies and competency requirements (i.e. vertical alignment), and these models are used as the foundation for multiple HRM practices (i.e. internal alignment). Subsequently, the process continues with the alignment of the language, interests and actions of line managers (i.e. alignment of line managers) and employees (i.e. alignment of employees). Finally, the alignment of employees results in outcomes at the individual level (i.e. competencies and employee performance) and at the organizational level (i.e. organizational performance).

As mentioned, the systematic review addresses the process in which CHRM can be effective. Building on the process model of HRM, our analysis distinguished outcomes at the 'individual level' from the 'organizational level'. This distinction is consistent with the levels related to the HRM-performance research (Boselie et al., 2005), and has also been recommended in competency management literature by Fleury and Fleury (2005). We only found one paper that conducted quantitative research to study the relationship of CHRM with the outcomes (i.e., Levenson et al., 2006). Since the

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identified outcomes are not based on quantitative research, we have decided not to provide a detailed treatment of the outcomes. Qualitative research has identified outcomes at the individual level such as employee performance, career options and competencies (e.g., Capaldo et al., 2006; Horton, 2000), and at the organizational level such as organizational performance, organizational climate and culture, and service quality (e.g., Homer, 2001; Rodriguez et al., 2002).

Below, we will describe the function of the types of alignment in the process in which CHRM may be effective. In all three sections, we will review findings that shed a light on the types of alignment in this process, as well as discuss challenges pertaining to several individual and organizational variables that intervene in this process. The types of alignment that were inducted from the review are all based on empirical research. In addition, we also found normative accounts for each of these types of alignment. In presenting the findings, we will clarify the extent to which they are based on empirical research and normative accounts.

Intended competency-based HRM: Vertical alignment and internal alignment

Findings from the systematic review

Table 2 shows that the direct and indirect evidence indicates that vertical alignment and internal alignment are important in intended CHRM for understanding the process in which CHRM may be effective. More specifically, 26 articles, including 10 articles with direct evidence, stress the importance of vertical alignment and 22 articles, including 10 articles with direct evidence, stress the importance of internal alignment.

First, 13 articles build on qualitative data to emphasize that vertical alignment is an important type of alignment for effective CHRM and another 13 articles make normative accounts about its importance. These articles argue that CHRM may facilitate the alignment of organizational strategy with the competency requirements of employees. This link is fostered by competency models that contain vision-critical competencies (e.g., Bergenhenegouwen et al., 1997; Rothwell & Lindholm, 1999). By assessing and closing the gap between required and demonstrated competencies, CHRM contributes to the efficient implementation of organizational strategy (e.g., Alldredge & Nilan, 2000; Athey & Orth, 1999). Based upon empirical findings, two articles specifically refer to this link between competency models and organizational strategy as "vertical alignment" (Brans & Hondeghem, 2005; Hondeghem & Vandermeulen, 2000). This is consistent with the observation that CHRM practice has adopted this concept from the HRM literature (Sparrow, 2002). It refers to the degree of coherence between HRM and organizational resources that leads to competitive advantages (Huselid et al., 1997).

Second, fourteen articles build on qualitative research to suggest that internal alignment is essential in achieving effective CHRM and 8 articles stress its importance with normative accounts. Competency models may align HRM practices into a consistent system. HRM practices may be coherently combined using competency models for recruitment, selection, development, appraisals and rewards. In these models, competency requirements are expressed in the form of observable and measureable behavioral indicators. The same competency model can be used for each of the HRM

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Table 2: Four types of alignment in the process model of competency-based HRM (CHRM): direct evidence (n=21) and indirect evidence (n=33)

Intended CHRM (n=36)	**Vertical alignment (n=26)**	Direct evidence (n=10)	Brans & Hondeghem (2005); Currie & Darby (1995); Homer (2001); *Hondeghem & Vandermeulen (2000)*; Horton (2000); Lee et al. (2010); Özçelik & Ferman (2006); *Vakola et al. (2007)*; Rodriguez et al. (2002); Serpell & Ferrada (2007)
		Indirect evidence (n=16)	Athey & Orth (1999); *Bergenhenegouwen et al. (1997)*; Briscoe & Hall (1999); Cannon (1995); *Cardy & Selvarajan (2006)*; Chung-Herrera et al. (2003); Fleury & Fleury (2005); Hayton & Kelley (2006); Heffernan & Flood (2000); Hollenbeck et al. (2006); Iles (1993); *Intagliata et al. (2000)*; Lawler (1994); Pickett (1998); *Shippmann et al. (2000)*; Townley (1999)
	Internal alignment (n=22)	Direct evidence (n=10)	Alldredge & Nilan (2000); *Brans & Hondeghem (2005)*; Gangani et al. (2006); *Horton (2000)*; Lee et al. (2010); Rodriguez et al. (2002); Serpell & Ferrada (2007); Özçelik & Ferman (2006); *van der Meer & Toonen (2005)*; *Vakola et al. (2007)*
		Indirect evidence (n=12)	*Azmi (2010)*; *Bouteiller & Gilbert (2005)*; Cannon (1995); Chung-Herrera et al. (2003); Dainty et al. (2005); Goldstein (1995); Iles (1992); Mansfield (1996); Marelli et al. (2005); Pickett (1998); Shippmann et al. (2000); Townley (1999)
Implemented CHRM (n=20)	**Alignment of line managers (n=20)**	Direct evidence (n=12)	*Becker & Huselid (1999)*; *Capaldo et al. (2006)*; *Hondeghem & Vandermeulen (2000)*; *Horton (2000)*; Lee et al. (2010); Levenson et al. (2006); Jones (1995); Morris (1996); *Özçelik & Ferman (2006)*; *Serpell & Ferrada (2007)*; *van der Meer & Toonen (2005)*; *Vakola et al. (2007)*
		Indirect evidence (n=8)	Bergenhenegouwen et al. (1997); Cannon (1995); Dainty et al. (2005); Godbout (2000); *Heinsman et al. (2006)*; Heinsman et al. (2008); Lewis (2002); Shippmann et al. (2000)
Perceived CHRM (n=28)	**Alignment of employees (n=28)**	Direct evidence (n=11)	Azmi et al. (2009); Brans & Hondeghem (2005); *Capaldo et al. (2006)*; Currie & Darby (1995); Gangani et al. (2006); Homer (2001); Horton (2000); *van der Meer & Toonen (2005)*; *Özçelik & Ferman (2006)*; Vakola et al. (2007); Six & Sorge (2008)
		Indirect evidence (n=17)	Athey & Orth (1999); Capaldo et al. (2006); Cardy & Selvarajan (2006); Camuffo & Comacchio (2005); Chung-Herrera et al. (2003); Ford & McIntyre (2004); Goldstein (1995); Hayton & Kelley (2006); Hollenbeck et al. (2006); Intagliata et al. (2000); Iles (1992); Lawler (1994); Lewis (2002); Lindgren et al. (2004); Mansfield (1996); Patterson et al. (2000); Rothwell & Lindholm (1999)

Note1: *references in italic* treat challenges in obtaining these types of alignment
Note 2: references that are not used in the body of the text, can be retrieved from the first author

practices. As a consequence, the organization sends a consistent message regarding the competency requirements for specific roles in clear behavioral terms (e.g., Brans & Hondeghem, 2005; Rodriguez et al., 2002; Capaldo et al., 2006). In CHRM, competency models communicate required behavior in a congruent manner by directing diverse HRM practices. In this regard, 3 articles refer to the concept of "internal alignment" (Iles, 1993) or to the concept of "horizontal integration" (Brans & Hondeghem, 2005; Hondeghem & Vandermeulen, 2000). CHRM practice has adopted this concept from the HRM literature (Sparrow, 2002). It refers to the degree to which HRM practices are internally consistent in signaling required behavior (Delery & Doty, 1996).

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Challenges pertaining to intended competency-based HRM

Although vertical alignment and internal alignment are considered to be necessary to foster effective CHRM in respectively 26 and 22 articles, our findings indicate that these types of alignment are difficult to achieve. For vertical alignment, 7 articles, among which 3 articles with direct evidence, emphasize that achieving a link between organizational strategy and competency requirements in a competency model is challenging (e.g., Cardy & Selvarajan, 2006; Hondeghem & Vandermeulen, 2000; Vakola et al., 2007). In addition, 6 articles, among which 4 articles with direct evidence, indicate that internal alignment is not easy to implement (e.g., Brans & Hondeghem, 2005; Bouteiller & Gilbert, 2005; Vakola et al., 2007). Regardless of the commitment of an HR department to applying CHRM, there may be differences in the extent of internal alignment within an organization (Horton, 2000). In addition, the internal consistency of the implementation of competency models in talent management and performance management may be questioned (Azmi et al., 2009; van der Meer & Toonen, 2005).

Implementing CHRM is a means in a change management process which implies that resistance to change should be carefully managed as from the beginning in implementing vertical and internal alignment (Horton, 2002). Our review has found that the involvement of top managers, HR managers, line managers, employees, and unions in the phase of the intended CHRM is crucial.

HR managers should take the role of the director in processes involving organizational and management change. In addition, it has been suggested that top managers should provide the organization with guidance in identifying core competences through strategic management processes. These core competencies should be translated in required competencies in the competency models. The top managers' buy-in as from the start is crucial for a successful implementation (e.g., Bergenhenegouwen, 1997; Godbout, 2000). Also consultants are often involved in intended CHRM. Although this is not necessarily bad, some self-declared experts with little expertise develop competency models which has led to deterioration in the quality of some competency models (Hollenbeck et al., 2006).

Our review suggests that one of the goals of the implementation of CHRM is to strengthen the role and responsibilities of line managers. Therefore their involvement is important (Hondehem & Vandermeulen, 2000). However, it has been argued that there is a tendency to overestimate the willingness of line managers to be engaged in this type of management. The danger is that competency remains an abstract concept for line managers rather than part of their everyday routine (Bouteiller & Gilbert, 2005; Van der Meer & Toonen, 2005). It appears from the review that one of the problems of implementation failure is that line managers are not involved and that HRM builds competency models that are too demanding for the subsequent implementation by the line managers (Horton, 2002). Even when the line managers are involved, a bureaucratic pitfall may occur because the developed models are too extended or because line managers lack people management skills (Capaldo et al., 2006).

Besides line managers also employees have to support and stimulate the use of competency management. Employees should also be involved in intended CHRM. They should at least be informed about the relevancy of implementing this manage-

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ment tool to the organization and to them (Heinsman, 2006). Based on action research, it has been suggested that 'managers have to work through individuals' competence interests in order to meet the competence development needs of the organization. This approach to competence development might prove to be particularly challenging in situations where employees' interests are at odds with the organization's (and its customers') needs' (Lindgren et al., 2004: 456).

Finally, qualitative research has indicated that resistance by the unions may threaten an effective implementation (Horton, 2000; Hondeghem & Vandermeulen, 2000). An example is that the unions of the Federal Government in Belgium questioned several elements of CHRM '(1) as breaches of the principle of equality; and (2) as threats to vested interests' (Brans & Hondeghem, 2005). In sum, the essence is that the HRM department, the line managers, the employees and the unions need to be involved in the implementation of CHRM as from the beginning.

Implemented competency-based HRM: Alignment of line managers

Findings from the systematic review

As shown in table 2, both direct and indirect evidence suggests that the alignment of line managers is essential to explain the process in which CHRM is effective. More specifically, 20 articles, including 12 articles with direct evidence, indicate the importance of this type of alignment in this process. Our abstraction efforts of literal quotes in these 20 articles lead to the concept of the "alignment of line managers". This concept refers to the alignment of the language, interest and actions of line managers with CHRM.

First, the review builds on empirical research in 5 articles to identify language alignment as an important part of the alignment of line managers. Language alignment implies that line managers and HR departments speak the same language. Line managers may align their language with the competency models that are developed by HR departments. Line managers and HR departments have a shared understanding of the meaning of specific competency requirements. In addition, the competency models should offer line managers a tool with which to understand the demonstrated competencies of their subordinates. The gap between the required and demonstrated competencies allows line managers to become aware of what is required from their employees to reach their performance goals (e.g., Becker & Huselid, 1999; Capaldo et al., 2006; Vakola et al., 2007).

Second, based on empirical findings in 6 articles and 5 articles with normative accounts it is suggested from this review that interest alignment is an important aspect of the alignment of line managers. Interest alignment refers to the commitment of the line managers to the system. Because the implementation of CHRM often depends on the discretionary behavior of line managers, it is important that they acknowledge its meaningfulness and the benefits that apply to their positions. Line managers should be committed to CHRM (e.g., Hondeghem & Vandermeulen, 2000; Horton, 2000; Levenson et al., 2006).

Finally, based on the empirical findings from 9 articles and 2 articles with normative accounts this review suggests that action alignment also is important in the align-

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ment of the line manager. Action alignment concerns challenging, empowering and coaching employees with regard to the competency requirements in the models. Action alignment concerns the ongoing informal responsibility of line managers and their involvement in formal HRM practices, such as selection and developmental appraisal (e.g., Bergenhenegouwen et al., 1997; Levenson et al., 2006; Vakola et al., 2007).

Challenges pertaining to implemented competency-based HRM

Eight articles with direct evidence (e.g., Capaldo et al., 2006; van der Meer & Toonen, 2005) and 1 article with indirect evidence (Heinsman et al., 2006) have empirically found that the availability of competency models does not necessarily imply the alignment of line managers. Several challenges may hinder the achievement of the alignment of line managers.

The first challenge in obtaining the alignment of line managers may be a lack of language alignment. Rather than aligning the language of line managers, detailed descriptions of required competencies may generate bureaucratic pitfalls (e.g., Horton, 2000; Lindgren et al., 2004).

The second challenge in obtaining the alignment of line managers concerns a lack of interest alignment. Line managers are not, by definition, committed to this management tool (e.g., Capaldo, et al. 2006; Hondeghem & Vandermeulen, 2000; Horton, 2000). Line managers may perceive the work that is involved in addressing a lengthy list of competency requirements as a bureaucratic burden rather than as worthwhile work. As a consequence, they may perceive their required involvement as time-consuming (e.g., Hondeghem & Vandermeulen, 2000). Rather than aligning their interests, they may abuse their power in implementing the HRM practices in an unfair way (Den Hartog et al., 2004).

The third challenge concerns whether line managers align their actions with CHRM. CHRM is often restricted to HR managers, and the actual implementation by line managers occurs in a scattered manner. Within an organization, there may be differences in the actual use of CHRM between departments, even beyond the implementation phase (e.g., Horton, 2000). The problem may be that line managers lack the appropriate people management competencies and education (e.g., Capaldo et al., 2006; Gangani et al., 2006).

Thus, our systematic review of CHRM has shown that the alignment of line managers is important but often problematic. Similarly, in the HRM literature, there is a growing consensus regarding the gap between intended and actual HRM practices (e.g., Boxall et al., 2011; Nishii & Wright, 2008). This gap can be explained by the discretionary role of line managers in enacting HRM policy (Kinnie et al., 2005; Nehles et al., 2006). In relation to this gap, it may be relevant to build on the explanatory potential of the social exchange theory to understand discretionary behavior (Purcell & Hutchinson, 2007). The "norm of reciprocity" is central to the social exchange theory (Blau, 1964). In social exchanges, inducements create obligations for individuals to reciprocate in the form of discretionary contributions. Material resources, information and support induce social exchange (Wayne et al., 1997). Line managers who obtain beneficial inducements from HRM departments and senior managers may feel obliged to apply CHRM. On the one hand, HRM departments should support line managers

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in applying these practices (Heinsman et al., 2008). On the other hand, senior managers should offer inducements to line managers (Nehles et al., 2006). The social exchanges between line managers and their HRM departments and senior managers may constitute the conditions under which the alignment of line managers can be fostered. When line managers perceive that they are supported and informed by their HRM departments and senior manager. Line managers may reciprocate in their discretionary use of CHRM.

Perceived competency-based HRM: Alignment of employees

Findings from the systematic review

According to 28 articles, including 11 articles with direct evidence, the alignment of employees is an essential part of the process of CHRM (see table 2). Similar to the concept of the alignment of line managers, our abstraction efforts of these 28 articles lead to the concept of the 'alignment of employees'. Also this concept refers to language, interest and action alignment. This type of alignment is important for achieving effective CHRM.

First, based on empirical findings in 11 articles and 8 articles with normative accounts, this review suggests that language alignment is an important aspect of the alignment of employees. Language alignment relates to employees' understanding of the meaning of competency requirements. Language alignment involves a clear understanding of the expectations that must be fulfilled to ensure success. Employees should understand how their behavior contributes to organizational success. Clarity in an organization's expectations encourages employees to align their demonstrated competencies with organizational competency requirements (e.g., Shippmann et al., 2000; Vakola et al., 2007). The behavioral indicators in the competency models may provide clarity regarding the precise meaning of a specific competency. The literature pertaining to CHRM often refers to a "common language" (e.g., Brans & Hondeghem, 2005; Rodriguez et al., 2002).

Second, empirical findings from in 5 articles suggest that interest alignment is important for the alignment of employees. Interest alignment refers to the match between the competency requirements in competency models and the aspirations of employees with regard to the development of new competencies. This match may be achieved by ensuring the transparency of both the competency requirements and the aspired competencies in diverse HRM practices (e.g., Gangani et al., 2006; Lindren et al., 2004; Brans & Hondeghem, 2005).

The third aspect concerns the alignment of the behavior or actions of employees to reduce the gap between competency requirements and demonstrated competencies. This finding is based on 8 empirical articles and 9 articles with normative accounts. The competency model is a reference tool that may be useful in day-to-day initiatives and decision making. For instance, it enables job performance by clarifying what is required to be a competent performer (e.g., Capaldo et al., 2006; Vakola et al., 2007).

Challenges pertaining to perceived competency-based HRM

Three articles stressed some challenges involved in achieving the alignment of employees. First, achieving the language alignment of employees may be problematic.

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When requirements are not translated in a specific context, employees may interpret competency requirements differently (Capaldo et al., 2006; Özçelik & Ferman, 2006). Second, the action and interest alignment of employees may be lacking. Employees must align their actual behavior to the competency requirements in their organizations. This alignment requires employees to align their interests with those of their organizations (Hollenbeck et al., 2006). However, in practice, employees may not align their interests accordingly. Some researchers observe signs of strategic behavior that are contrary to the interests of an organization (van der Meer & Toonen, 2005). Thus, employees may interpret competency models in an unintended manner and may align neither their language nor their interests and actions with CHRM.

Similarly to the findings in the systematic review the HRM literature has recently distanced itself from the assumption that HRM affects employees homogeneously (Boselie et al., 2005). Variance may occur at the individual level of employee perceptions of HRM. This variation occurs because different line managers vary in their actual use of HRM practices and because individuals make their own interpretations when processing information (Wright & Nishii, 2007). Whether employees will engage in beneficial contributions to an organization in return for HRM practices depends on the value that they attribute to these practices (Guest, 1999).

In essence, several individual-level variables could influence interpretations and perceptions regarding the utility of HRM practices for different employees. For instance, variance in employee perceptions may exist because of the personal goals, values, personalities, and competencies of employees (Nishii & Wright, 2008); their age (Kooij et al., 2009); and their intrinsic motivation (Kuvaas, 2006). An organization's interests in terms of competency requirements may differ from the interests of its employees (Lindgren et al., 2004). Employees may interpret the usefulness of CHRM to them based on several dispositional and individual-level variables. When employees regard CHRM as meaningful, this perception will foster their alignment.

Discussion

Theoretical implications

The systematic review addresses the process in which CHRM can be effective. The review raises several implications.

First, vertical alignment and internal alignment are important mechanisms by which HRM can promote organizational effectiveness (Schuler & Jackson, 2005). We found that research on CHRM provides empirical support of the effectiveness of vertical alignment and internal alignment. The reasoning that vertical alignment and internal alignment are always the best practice, fits in the universal perspective. However, it may also be relevant to consider a contingency perspective (Delery & Doty, 1996). It may be relevant for organizations to have within-organizational differences in the extent of vertical alignment and internal alignment. Differences in the extent of vertical alignment and internal alignment may actually serve the strategic needs of the organization. There is a the need for differences in the extent of vertical alignment and internal alignment depending on the job context (Cardy & Selvarajan, 2006). This suggestion mirrors the proposition in HRM literature that that the process in which HRM is effective may start from different perspectives (Delery & Doty, 1996),

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and that different jobs may require a different HRM architecture (Tsui et al., 1997; Lepak & Snell, 1999). Support jobs and knowledge-based jobs may require differences in vertical alignment and internal alignment.

On the one hand, support jobs operate in stable task contexts, vertical alignment is less necessary because these jobs contribute less directly to the achievement of organizational goals. Because of the stable context, the competency models for these jobs can be job-based because the competency requirements in these models remain stable over time (Cardy & Selvarajan, 2006). Therefore, competency models can serve as links between diverse HRM practices which implies the relevance of internal alignment. In these jobs, the universalistic perspective can be followed. This perspective posits that 'some HRM practices are always better than others' (Delery & Doty, 1996: 803).

On the other hand, knowledge-based jobs are complex, defining the competency requirements to ensure performance in advance is difficult. Performance expectations may not be clearly established in an outside-in manner because of the turbulent, unpredictable task context (Morgeson & Humphrey, 2006). These jobs operate in changing, unpredictable task contexts and require vertical alignment. This type of alignment may be linked to the vital role of organization-specific, inimitable competencies for competitiveness according to the resource-based perspective (Lado & Wilson, 1994). In this context, continuous adaptation is essential. Diverse HRM practices cannot be organized around a tight competency model that implies predictable competencies. The continuous HRM reconfiguration implies a low level of internal alignment. An HRM policy must ensure flexibility by attracting employees with broad competencies, such as learning abilities (Wright et al., 1994). This selection relates to organizational membership rather than to the fulfillment of a particular job (Lawler, 1994). Vertical alignment occurs through the process of continuous adaptation from the inside-out. Competencies should be developed prior to the undertaking of changes in strategic orientations (Fleury & Fleury, 2005). Diverse HRM practices cannot be organized based on a strict competency model that dictates predictable competencies, which implies a low level of internal alignment. Employees often need to develop competencies on the job while encountering complex and new problems (Lindgren et al., 2004).

The findings from this review support both utilitarian and developmental humanistic perspectives of management. On the one hand, advocating a fit between strategic objectives and required competencies can be regarded as important from an utilitarian perspective of management (Sandberg, 2000). Whereas employees play a following role in this perspective, line managers and HR managers play a leading role. On the other hand, our review suggests that this fit can also be regarded to be important from a developmental humanistic perspective (Garavan & McGuire, 2001). A top down deductive approach may not work well for knowledge-based jobs in which developing competencies while performing work is essential. Employees play a leading role in developing the emergent strategy. For knowledge-based jobs, it is required to provide employees with more power and to involve them in building the strategy (Fleury & Fleury, 2005; Lindgren et al., 2004).

Furthermore, there are many challenges involved that hinder the flow of the process in which CHRM can be effective. These challenges can be regarded as restrictive

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boundaries within which the process takes place. Already in the first phase of intended CHRM problems may raise. The HR department has the tendency to overestimate the support from the top managers (e.g., Bouteiller & Gilbert, 2005). We found that achieving a link between organizational strategy and competency requirements is challenging, but important (e.g., Vakola et al., 2007). The finding that this is an important endeavor is consistent with the broader HRM literature (e.g., Guest, 1997).

Even when line managers and employees are involved in developing CHRM, describing required competencies and applying CHRM in the HRM cycle, their alignment of language, actions and interests is not ensured. Bureaucratic pitfalls may follow from the first-phase implementation and, consistent with HRM literature, line managers may lack time, support and skills for people management (Nehles et al., 2006). Their misalignment and employees idiosyncratic interpretations of CHRM may lead to unintended employee perceptions (Bowen & Ostroff, 2006). The extent to which line managers and employees are aligned with CHRM may thus enable or disrupt outcomes from vertical alignment and internal alignment.

Also the effectiveness of HRM in general may depend on the extent of the alignment of both line managers and employees. These forms of alignment deal with the language, interest, and action alignment. In the HRM literature, there is no equivalent concept we know of. The concept of 'alignment of employees' goes beyond 'line of sight' which deals with action and interest alignment of the employee to the strategic goals (Boswell, 2006). The difference lies largely in that alignment of line managers and alignment of employees also involves language alignment. Employees, line managers and HR management should speak the same language on how to contribute to the organizational goals. Since HRM literature has stressed the importance of the aspect of communication in HRM effectiveness (Bowen & Ostroff, 2004), the aspect of language alignment in CHRM literature may also be relevant in the distinct, but related HRM research.

Limitations

We must acknowledge that our study has its limitations.

First, CHRM might not really be an established concept. Although we have proposed our search terms to scholars that have published on CHRM at multiple international conferences and by email, it may be that some articles are left out because they use other terms than competency/competence as the corner stone in competency models.

Second, by using the process model of HRM as a constitutive background, some HR aspects may lack. The process model focuses on the process without considering the context. This may have narrowed our study of how CHRM is effective. It may be that elements from the context disrupt the process. Furthermore, it is unclear what is the required time to implement CHRM. As for other process models of HRM, the direction of the causality should not be taken for granted (see Den Hartog et al., 2004).

Third, the literature stream is predominantly qualitative in nature. Although this has allowed us to obtain insights in the process how CHRM is effective, this has restricted us in drawing firm conclusions on the outcomes of CHRM and the involved alignment forms (Harden & Thomas, 2005). More quantitative research is needed.

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Finally, the proposed process model of CHRM may oversimplify complex phenomena and the complex interplay of different organizational variables. Nevertheless, we believe that our systematic approach to gathering and analyzing the existing research may have minimized the bias that is inherent in literature reviews (Tranfield et al., 2003).

Below, we consider the implications of the process model of CHRM for HRM practitioners and for future research.

Implications for HRM practitioners

HRM practitioners have called for research pertaining to competency-based HRM to inform their future practices. Consequently, we will discuss the implications of our process model for HRM practitioners.

First, CHRM must shift away from the assumption that higher levels of internal and vertical alignment are always better. Rather, internal and vertical alignment may be regarded as two dimensions of intended CHRM. These dimensions should correspond to specific job types to maximize the effectiveness and predictability of the task context. Thus, the achievement of maximum performance outcomes necessitates variability in the extent of vertical alignment and internal alignment within an organization. Variance in the extent of vertical alignment implies that core competencies are not necessarily required from every member of an organization. Rather than establishing core competencies for every employee, HRM practices should attempt to link core competencies with strategy (Fleury & Fleury, 2005). These required competencies should be included in the competency models of strategy-based jobs.

Second, strict adherence to the rhetoric of vertical alignment and internal alignment may be problematic for CHRM. Intra-organizational variance in the actual use of CHRM by line managers is often high (e.g., Horton, 2002). It is important to recognize and manage the mechanisms that may hinder the process of securing the alignment of line managers. In addition to the important roles of HRM departments in enabling alignment of line managers, the commitment of senior managers to CHRM is crucial. HRM departments and senior managers must offer several inducements to encourage line managers to actually apply CHRM. Such inducements may include training, information, support, and time. These inducements to line managers may avoid time-consuming bureaucratic pitfalls.

Third, the process of achieving effective CHRM may be hindered when there is a lack of alignment of employees. HRM practitioners and line managers should acknowledge that employees value CHRM in different ways. Employees may choose not to align their language, interests, or actions, depending on whether CHRM addresses their personal needs and expectations. For employees in knowledge-based jobs who have a significant amount of discretionary space in which to perform their jobs, it is necessary to communicate and market the future competency requirements of an organization. An organization should strive to achieve an optimal match between organizational competency requirements and the competency aspirations of employees. In addition, CHRM should not be applied as 'organizational clockwork'. When wrongly applied, CHRM may constitute a revival of Tayloristic management (Lindgren et al., 2004). If certain employees perform exceptionally well in their jobs because of

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personal talents that are not included in the competency models, then these talents should be valued.

In sum, in evaluating CHRM four types of alignment can be regarded as essential process effectiveness indicators, namely vertical alignment, internal alignment, alignment of the line manager, and alignment of the employee.

Implications for future research

In the current review, we have provided a process model of CHRM in which four types of alignment (vertical alignment, internal alignment, alignment of line managers, and alignment of employees) lead to enhanced performance. Further empirical work must be undertaken to confidently explain the process in which this linkage occurs. Future research should consider conducting empirical tests of the various parts of our process model. Interacting mechanisms should be considered in this relationship. For instance, whether the alignment of line managers enhances employee performance may depend on the individual interpretation schemes, needs and expectations of employees (Wright & Nishii, 2008). For example, trust may function as an interpretation scheme (Dirks & Ferrin, 2001). Trust in line managers may affect employee interpretations of the implemented CHRM practices of line managers. Under low levels of trust, the alignment of employees may be less likely to occur. Strategic behavior of employees that favors their own interests may prevail when their trust in their line managers is low.

Our systematic review indicates that the current literature on CHRM primarily begins with a best-practice perspective rather than a contingency perspective. Although this body of literature has already provided valuable insights that facilitated this review, more research should be conducted from a contingency perspective. Future research may benefit from linking the required extent of vertical alignment and internal alignment within an organization to specific job types. The effect of CHRM on performance may depend on specific job types. For example, we expect that a high degree of vertical alignment will be less effective for support jobs and may contrast with the predictable nature of these jobs. Research that is conducted from a contingency perspective will inform practitioners on the required job-based differentiation in their application of CHRM.

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