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# The impact of individual and shared employee perceptions of HRM on affective commitment

## Considering climate strength

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### Abstract

**Purpose** – The purpose of this paper is to answer the question of whether individual perceptions of an HRM system – distinctiveness, consistency and consensus – and shared perceptions of HRM (climate strength) are positively related to affective commitment in the organization. In addition, the paper examines if climate strength has a mediating effect in the relationship between the individual perceptions of an HRM system and affective commitment.

**Design/methodology/approach** – A survey study with data from 671 employees, 67 line-managers and 32 HR-managers within four hospitals was used.

**Findings** – Results of two-level analyses (department, employee) showed that the perception of distinctiveness, consistency and climate strength, as expected are positively related to affective commitment. Instead of a mediating effect of climate strength a moderator effect was found: the relationship between consistency and affective commitment is stronger when climate strength is high.

**Research limitations/implications** – The study offers researchers some recommendations to focus on the process of HRM (in terms of distinctiveness, consistency and consensus), and on the importance of shared perceptions within a department.

**Originality/value** – This study shows the impact of aspects of the process of HRM on the individual level, and shared perceptions of high commitment HRM on the department level on affective commitment of employees.

**Keywords** Human resource management, Employee behaviour, Job satisfaction, Organizational effectiveness

**Paper type** Research paper



Because commitment seems to predict critical employee behaviour, such as performance (e.g. Angle and Perry, 1981; Becker *et al.*, 1996; Meyer *et al.*, 1989; Steers, 1977), absenteeism (e.g. Eby *et al.*, 1999; Mowday *et al.*, 1979), and organizational citizenship behaviour (e.g. Van Dyne and Ang, 1998), for more than 30 years managers and organizational researches have been interested in the commitment of employees. In this paper we focus on affective commitment to the organization since many scholars (e.g. Meyer *et al.*, 2004; Vandenberghe *et al.*, 2004) believe that especially this form predicts desired employee behaviour, that is defined as: an emotional attachment towards the organization such that the strongly committed individual identifies with, is involved in, and enjoys the relationship with the organization (Allen and Meyer, 1990; Meyer and Allen, 1991).

During the last decade attention has been paid to the effects of high commitment human resource management (HRM), (e.g. selective hiring, career opportunities, performance appraisal, and participation in decision making), defined as a bundle of HRM practices focusing on employee commitment. For instance, Benkhoff (1997) and Agarwala (2003) found a positive relationship between high commitment HRM and affective commitment of employees. The basic assumption is that high commitment HRM, through the added value of dedicated employees, ultimately contributes to the organizational effectiveness (Arthur, 1992; Guest, 1997).

Instead of high commitment HRM, recent theoretical developments (Bowen and Ostroff, 2004; Neal *et al.*, 2005; Ostroff and Bowen, 2000; Patterson *et al.*, 2004; Patterson *et al.*, 2005) focus on the process of the HRM system. In these theoretical models the focus is on the key features of an HRM system that create an organizational climate, defined as the shared perceptions of employees of “what the organization is in terms of practices, policies, procedures, routines and rewards” (Bowen and Ostroff, 2004, p. 205). The idea of the influence of collective climate perceptions can also found in the work of Parker *et al.* (2003). In their meta-analytic review on the relationship between individual climate perceptions and work outcomes such as employee attitudes, psychological well being, motivation and performance, Parker *et al.* (2003, pp. 407-408) emphasize the need for more research on collective climates.

Within organizational climate literature, organizational climate is distinguished in organizational climate level (James and Jones, 1974; Jones and James, 1979) or climate quality (Lindell and Brandt, 2000) as the average of perceptions of employees within an organization or a team and organizational climate strength (Schneider *et al.*, 2002; Patterson *et al.*, 2005) or climate consensus (Lindell and Brandt, 2000) as the shared perceptions within an organization or a team. Given these definitions of climate level and climate strength, we argue that when Bowen and Ostroff (2004) use the term organizational climate they refer to climate strength. In this study we focus on climate strength (Gonzalez-Roma *et al.*, 2002; Klein *et al.*, 2001; Schneider *et al.*, 2002) as the *shared* perceptions of high commitment HRM within a department.

In this paper, we extend the research of the individual effects of high commitment HRM on affective commitment in two ways. First we extend this research by focusing on the process of HRM, instead of the content as was suggested recently (Neal *et al.*, 2005), and examine the relationship between distinctiveness, consistency and consensus of an HRM system (Bowen and Ostroff, 2004) on one hand and affective commitment on the other hand. Second, we extend the research of individual effects of high commitment HRM on affective commitment by focusing on the idea of “climate strength” in which employees share the perception of high commitment HRM. Consequently, the research question of this study is as follows:

- RQ1.* To what extent can the individual perception of an HRM system and shared perceptions of high commitment HRM contribute to affective commitment to the organization of employees?

### **Strength of HRM: focusing on the process**

Viewing HRM practices as communications from the employer to employee (Guzzo and Noonan, 1994), Bowen and Ostroff (2004) propose that the attribution theory (Kelley, 1967, 1973; see also Fiske and Taylor, 1984) is thought to be useful to identify the key

features that will allow for messages to be received and interpreted uniformly among employees. According to the situational aspects of the attribution theory, individuals can make confident attributions about cause-effect relationships depending on the degree of distinctiveness (the event-effect is highly observable), consistency (the event-effect presents itself the same across modalities and time) and consensus (there is agreement among individuals' views of the event-effect relationship). In the following we consider these three aspects.

Distinctiveness of the HRM practices can be seen as the relevance of HRM which refers to whether the situation is defined in such a way that individuals see the situation as relevant to an important goal (Kelman and Hamilton, 1989), and the legitimacy of authority of HRM that leads individuals to consider submitting to performance expectations as sanctioned behaviours. Consistency refers to the internal consistency or the internal alignment among HR-practices. In recent years, theoretical and empirical work has been done on the importance on designing an HRM system with practices that are consistent to each other in achieving the organizational goals (Guest, 1997; Delery, 1998; Baron and Kreps, 1999). And consensus in HRM results when there is agreement among policy makers about the event-effect relationships (Bowen and Ostroff, 2004). When employees perceive message senders (line and HR managers within an organization) as strongly agreeing among themselves on the message, they are more likely to form consensus.

When an HRM system is perceived as high distinctive, high consistent and when there is consensus between the policy makers it can be expected that they "contribute to firm performance by motivating employees to adapt desired attitudes and behaviours that, in the collective, help achieve the organization's strategic goals" (Bowen and Ostroff, 2004, p. 204). In this paper we assume that affective commitment to the organization is one of the desired behaviours of employees and translate the theoretical model of Bowen and Ostroff to affective commitment of employees. Although Bowen and Ostroff (2004) pay attention to the relationships among the three key features of an HRM system, in this paper we focus on the main effects. Given the three situational aspects of the attribution theory as key features of an HRM system our first hypothesis are formulated as follows:

- H1.* The more employees perceive the HRM system as distinctive (*H1a*), internally consistent (*H1b*), and the more policy makers agree on the HRM practices within a department (*H1c*), the more employees show affective commitment to the organization.

### **Climate strength: focusing on the shared perceptions**

Climate strength as the shared perceptions of high commitment HRM can be considered as a strong situation (Bowen and Ostroff, 2004; Mischel, 1973, 1977; Mischel and Peake, 1982; Rousseau and Fried, 2001; Weick, 1995). A strong situation can be characterized as established, having elaborated behavioural controls, being stable and closed from external influences. In these situations, expectations are high and well defined; this means that for all the employees it is known which norms, attitudes and behaviours are important. In a strong situation, variability among employees' perceptions of the meaning of the situation will be small and will reflect a common desired content (Schneider *et al.*, 2002).

On the other hand, weak situations can be characterized as having few and unknown norms, and being dynamic and emergent. In this sense a strong situation can be seen as cohesive group, which has a strong impact on its members, who will strive to keep the group intact and remain member of the group, conform to the group's norms and demands, and regard the group's interest above their own. This means that we can expect that climate strength, as considered as a strong situation, is positively related to affective commitment to the organization. Given the above-mentioned line of reasoning we can formulate our second hypothesis:

*H2.* Climate strength within a department is positively related to affective commitment to the organization.

Bowen and Ostroff (2004, p. 204) elaborate on climate strength as a mediating effect in the relationships between an HRM system and organizational performance. Analogous to the attribution theory, they "propose that HRM practices can be viewed as a signalling function by sending messages that employees use to make sense of and to define the psychological meaning of their work situation" (e.g. Rousseau, 1995). It can be argued HR practices influences a process or organizational sense making (Weick, 1995) by which "group members collectively understand and share their experiences of organizational events" (Parker *et al.*, 2003, p. 391). Given the above-mentioned line of reasoning we can formulate our third hypothesis:

*H3.* Climate strength has a mediating effect in the relationship strength of HRM (distinctiveness, consistency and consensus) and affective commitment.

## Method

### *Sample and design*

With a two-step stratified sampling approach (fixed sample of departments within hospitals, random sample of employees within departments), we collected data from 671 employees (67 per cent response), 67 line managers (98 per cent response), and 32 HRM consultants (100 per cent response). The dataset included 509 female (76 per cent) and 161 male employees (one missing), 31 female (46 per cent) and 36 male line managers, and 20 female (63 per cent) and 12 male HRM consultants. The mean age of the employees was 38.9 (SD = 10.9).

Within four hospitals, 18 departments were classified within four areas: clinical (cardiology, intensive care, internal medicine, child department, orthopaedics, chirurgic), out patient (out patient chirurgic, out patient cardiology, out patient neurology, kidney dialysis), support staff (kitchen, door and gatekeepers, financial administration, and warehouse), and para-/peri-medical (laboratories, physiotherapy, dietetics, and pharmacy).

Within each department, 15 employees were asked to fill out a questionnaire. All data were collected by means of questionnaires. Among other questions, employees were asked to fill out questions about affective commitment and their perception of high commitment HRM, and the three key features of the HRM system within their department. Line and HRM managers were asked to fill out questions about the three key features of the HRM system for their department(s). Because most HRM managers are responsible for more departments within one hospital, they fill out the questionnaire for each department they are responsible for.

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*Measurements*

Affective commitment (Allen and Meyer, 1990) was measured within the employees' questionnaire. The affective commitment scale consists of five items with anchors 1 = totally disagree, to 5 = totally agree (Cronbach alpha = 0.83). Examples of affective commitment items include "This organization means a lot to me" and "I feel at home in this organization".

*High commitment HRM.* In this study we distinguish between content (referring to high commitment HRM) and process of HRM (the HRM system). Based on the work of Tsui and Wang (2002) who distinguish between an Organizational Focused approach (High Commitment HRM) and a Job Focused approach towards employment relationships, High Commitment HRM was measured with ten items (Dorenbosch *et al.*, 2006). Employees were asked to use a five-point scale (1 = totally disagree, 5 = totally agree). Examples of this scale (Cronbach alpha = 0.80) are "In my opinion a lot of attention is paid to training", "A plan for my career is made in collaboration with my supervisor".

To measure the first aspect of *the HRM system*, distinctiveness, relevance and legitimacy of authority were taken into account (see also Bowen and Ostroff, 2004). Relevance was measured within the employees' questionnaire with seven items concerning the relevance of HRM practices. Factor analysis resulted in one factor. Examples of the scale relevance (Cronbach alpha = 0.74) are "I agree on the assessment rules within this organization", "In my opinion we have enough training possibilities within this organization". The employees were asked about the legitimacy of authority of the line-managers in the different departments. This was measured by means of the "strategic partner" and "change agent" roles of Ulrich (1997; see also Ulrich and Lake, 1991). The two scales consist each of five items (Sanders and Van der Ven, 2004). An example of the strategic partner role scale (Cronbach alpha = 0.81) include "My line manager ensures that goals are achieved", and an example of the change agent scale (Cronbach alpha = 0.84) includes "My line manager can adapt to changes in the environment". Because both scale are related to each other ( $r = 0.78$ ;  $p < 0.01$ ), the two scales are summed.

To measure the internal consistency of the HRM practices, we assessed within-respondent agreement on the ten high commitment HRM items. To do so, we used a consistency-based approach as proposed by Burke *et al.* (1999). This index is based on the calculation of the average deviation for each scale item for each respondent.

To measure the consensus between line and HRM consultants the same ten high commitment HRM items as in the employees' questionnaire were used. Line and HR managers were asked to answer these ten items for their department(s). The reliability (Cronbach alpha) of this scale was 0.84 for line managers, and 0.74 for HR managers. To measure the agreement between the two policy makers, answers on the ten items were first transformed to z-scores. Subsequently, differences between the scores of line managers and HR managers were calculated for the different practices for each department (see also Burke *et al.*, 1999), summed and were added to the dataset of the employees.

To measure climate strength within the different departments the within department variability (sign reversed standard deviation of employee perceptions of

high commitment HRM scale within a department; Schneider *et al.*, 2002) on the department level was measured.

*Control variables.* To control for employee characteristics, we include age in years, gender (0 = female, 1 = male), type of labour contract (0 = temporary labour contract; 1 = permanent labour contract), number of working hours, and level of education (1 = low; 6 = high).

The dataset consists of employees nested in departments, nested in hospitals. Because the variance of affective commitment is hardly related to the hospital level (0.01 per cent), this level is not taken into account. This means that the data can be conceptualized at two levels (employee and department level). Level 1 captures the information of the employees in each department (affective commitment, distinctiveness, and consistency), and level 2 captures the variability between departments (consensus between line and HR managers; climate level (high commitment HRM) and climate strength). In such situations, it is appropriate to use a hierarchical 2 level modelling approach that simultaneously models effects at the within- and between department-level (Raudenbush and Bryk, 2002).

Aggregation characteristics (values of ICC1 and ICC2; Bliese, 2000) were calculated for the different scales. The values of ICC1 are in the range of 0.08 to 0.14, and the values of ICC2 were all above 0.70. Given the amount of departments in the study, we can assume there is enough agreement within departments to make our study feasible. This means that the different scales intended for this study are acceptable (Klein *et al.*, 2001).

Because the different measurements were self reported and collected at a single point in time, Harman's one factor test (Podsakoff and Organ, 1986) was conducted to investigate the potential influence of common method variance. A factor analysis of the different items from affective commitment to the organization, distinctiveness, and consistency showed that the scales reveal three distinct factors. This strongly suggests that the measures of affective commitment are independent of the distinctiveness and consistency measures and that common method bias is likely to have a very limited effect.

## Results

Means and standard deviations, along with correlations between study variables, are reported in Table I. In accordance with our theoretical frame-work, relevance ( $r = 0.21$ ,  $p < 0.01$ ), legitimacy of authority ( $r = 0.24$ ,  $p < 0.01$ ), and consistency in HRM practices ( $r = 0.21$ ,  $p < 0.01$ ) are positively related to affective commitment to the organization. Although no significant relationships were found between consensus between policy makers and affective commitment ( $r = 0.03$ , n.s.) and between climate strength and affective commitment ( $r = 0.02$ , n.s.), we did find a positive relationship between consensus and climate strength ( $r = 0.12$ ,  $p < 0.01$ ).

*H1 (H1a; H1b; and H1c)* predicted that affective commitment is positively related with distinctiveness (relevance and authority legitimacy), consistency in HRM practices, and consensus between policy makers for a department. Table II presents the results of multi level analyses. Model 1 includes the control variables and in model 2, relevance, legitimacy of authority, and consistency are added at the individual level and consensus was added at the department level. High commitment HRM was added as a control variable. For both relevance (0.17,  $p < 0.01$ ) and legitimacy authority (0.07,

**Table I.**  
Means, standard  
deviations and  
correlations between  
study variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Affective commitment	3.09	0.65											
2. Relevance	3.51	0.47	0.21**										
3. Legitimacy authority	7.03	1.13	0.24**	0.45**									
4. High commitment HRM	2.26	0.54	0.27**	0.33**	0.34**								
5. Consistency HR	7.29	2.64	0.21**	0.19**	0.27**	0.24**							
6. Consensus line – HR	2.45	0.42	0.03	0.02	–0.10*	–0.07	–0.04						
7. Climate strength	0.51	0.12	0.02	–0.04	0.03	0.06	–0.05	0.12**					
8. Gender	0.76	0.42	–0.09*	–0.02	–0.03	0.01	0.01	–0.04	–0.17**				
9. Age	38.9	9.31	0.23**	–0.06	0.05	–0.09*	–0.08	–0.08	–0.01	–0.03			
10. Type of labour contract	1.92	0.28	0.01	–0.06	0.01	–0.12**	0.01	–0.07	–0.02	–0.06**	0.08*		
11. No. of hours a week	3.53	1.06	0.04	–0.12**	–0.05	0.06	0.07	0.06	0.11**	–0.42**	–0.22**	–0.02	
12. Level of education	4.26	1.02	–0.20**	–0.05	–0.15*	–0.17**	–0.07	0.04	–0.01	–0.07	–0.24**	0.01	0.08*

**Note:** \* =  $p < 0.05$ ; \*\* =  $p < 0.01$



**Table II.**Results of hierarchical  
regression analyses with  
affective commitment to  
the organization as  
dependent variable

	Model 1	Model 2	Model 3	Model 4
<i>Individual level:</i>				
Gender	− 0.04	− 0.04	− 0.05	− 0.04
Age	0.01 **	0.01 **	0.02 **	0.02 *
Type of labour contract	0.01	0.01	0.02	0.02
# Hours a week	0.08 **	0.10 *	0.10 *	0.11 *
Level of education	− 0.09 **	− 0.07 *	− 0.05 *	− 0.10 **
Relevance ( <i>H1a</i> )		17 **	0.15 **	16 **
Legitimacy authority ( <i>H1a</i> )		07 *	0.08 *	08 **
High commitment HRM		26 **	0.26 **	25 **
Consistency in HRM ( <i>H1b</i> )		04 **	0.04 *	04 **
<i>Department level:</i>				
Consensus line – HRM ( <i>H1c</i> )		0.07	0.08	0.05
Climate strength ( <i>H2; H3</i> )			0.25 *	0.24 *
<i>Interactions with climate strength:</i>				
Relevance				0.14
Legitimacy authority				0.09
Consistency in HRM				0.27 **
Consensus line – HRM				0.04
Constant	30.09 **	20.72 **	20.72 **	10.12 *
$\chi^2$	908.74 **	870.52 **	869.66	837.75 **
Deviance (change in $\chi^2$ (df))	44.63 (5)	38.02 (5)	0.86 (1)	29.91 (4)

**Note:** \* =  $p < 0.05$ , \*\* =  $p < 0.01$ 

$p < 0.05$ ) positive relationships were found with affective commitment. This means that we can confirm *H1a*.

In addition, a positive relationship was found between consistency in HRM and affective commitment (0.04,  $p < 0.01$ ), meaning we can confirm *H1b*. For consensus between line and HRM managers (0.09, n.s.), no significant relationship was found. Therefore, we cannot confirm *H1c*.

*H2* predicted a positive relationship between climate strength and affective commitment to the organization. Therefore in model 3 climate strength was added to the model at the department level. A positive relationship between climate strength (0.25,  $p < 0.05$ ) and affective commitment to the organization was found. This means that we can confirm *H2*.

*H3* predicted a mediating effect of climate strength. Using the Baron and Kenny (1986) it was expected that when adding climate strength to the analyses this effect will be significant, and that the effects of relevance, legitimacy of authority, consistency and of consensus should disappear. Although the effect of climate strength (0.25,  $p < 0.01$ ) was found significant, we did not find any significant change in effects of the features of the HRM system. Thus, we cannot confirm *H3*.

Within organizational climate research (Gonzalez-Roma *et al.*, 2002; Klein *et al.*, 2001; Schneider *et al.*, 2002), however, climate strength is mostly seen as a moderator influence. This means that, within situations with high climate strength, the effect of antecedents and outcomes will be stronger than within situations with low climate strength. Following this reasoning, we can predict a moderator effect of climate strength in the relationship between strength of the HRM system and affective commitment to the organization. To test this reasoning, we calculate interaction effects



between the features of strength of HRM and climate strength. In order to eliminate non-essential correlation between the interaction terms and their component variables, all predictor variables were centered (Aiken and West, 1991). These interactions are shown in model 4, Table II.

The analysis showed a significant interaction effect between consistency in HRM and climate strength (0.27,  $p < 0.01$ ). None of the other interactions were found significant. In Figure 1 the significant interaction effect is shown. As can be seen, the relationship between consistency in HRM and affective commitment is stronger in the condition that the climate strength is high.

Discussion

The purpose of this study was to extend the research on individual effects of high commitment HRM on affective commitment in two ways. First, we focused on the process of HRM as was suggested recently (Bowen and Ostroff, 2004; Neal *et al.*, 2005; Patterson *et al.*, 2004, 2005), and examined the relationship between distinctiveness, consistency and consensus of the HRM system on one hand, and affective commitment to the organization on the other hand. The hypotheses concerning this relationship were partly confirmed. When employees perceive the HRM system as more distinctive, in terms of relevant and legitimacy of authority, and as more internal consistent they are more affective committed to the organization. However, no effect was found for the third feature of the HRM system, consensus between policy makers about the HRM system for the same department. Although, multi actor data was used to assess the consensus between line and HR managers, no relationship was found between consensus in HRM and affective commitment of employees. This holds to the view that people’s behaviour is not simply determined by “actual” environmental factors, but is mediated by their cognitive response to their environment (Fiske and Taylor, 1984). Instead of using more actual measurements of consensus between policy makers it is maybe more reliable and valid to assess the perception of the employees concerning the different forms of consensus instead of the consensus between line and HR managers. This means that further research should take into account the perception of the

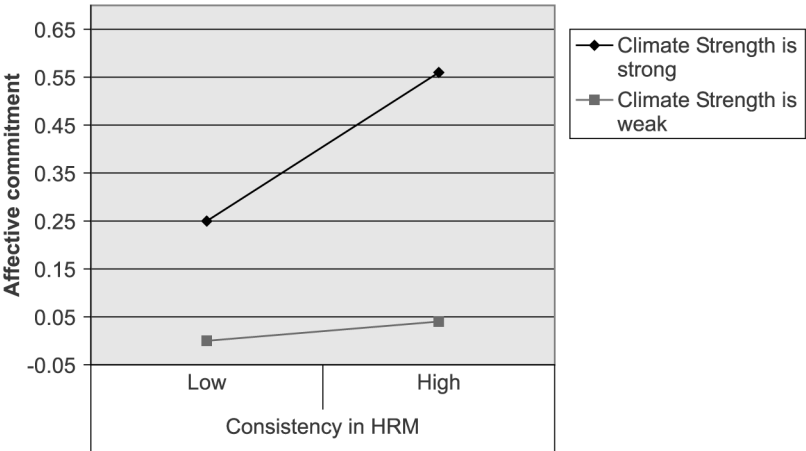


Figure 1.  
Affective commitment as a  
function of organizational  
climate and consistency in  
HRM

employees concerning the consensus of the policy makers for a department as well, and should compare this measurement with the kind of measurements that are used in this study. The expectation can be made that the higher the consensus between employee and policy makers on HRM policies within the department or organization, the higher the employee is committed to the organization.

Second, we extend the current research of the individual effects of perception of high commitment HRM on affective commitment by focussing on the ideas of “climate strength”: do shared perceptions of employees about high commitment HRM within a department contribute to affective commitment, and how does it influence the relationship between HRM system features and affective commitment. In this study, in addition to a positive relationship between climate strength and affective commitment we predict a mediating effect of climate strength in the relationship between the features of the HRM system and affective commitment. Despite a positive effect of climate strength on affective commitment, no mediating effect of climate strength was found. Instead of the mediating effect a moderator effect of climate strength was found for the relationship between the perception of consistency in HRM and affective commitment; this relationship is stronger in the condition that the climate strength is high. This result supports organizational climate research (Gonzalez-Roma *et al.*, 2002; Klein *et al.*, 2001; Schneider *et al.*, 2002) that climate strength moderates the relationship between climate perceptions and employee outcomes.

To control for strategy of the organization, work processes, influences of the outlet- and labour market and other environment characteristics (Baron and Kreps, 1999; Wright and Haggerty, 2005) we study one particular organization (hospitals) and select within the hospitals the same departments.

To understand the linkage between HRM practices and firm performances House *et al.* (1995) proposed a meso-paradigm, which concern the simultaneous study of organizational and individual- or group-level processes and delineate the processes by which the levels are related in the form of linking mechanisms. Alternative to most studies that involve the actual practices and their relationship with outcome measures, the theoretical focus of Bowen and Ostroff (2004) is on meta-features of the HRM system as predictors to effectiveness. As effectiveness is a multidimensional construct (Purcell *et al.*, 2005), with definitions depending on which constituency one takes into perspective, we choose to take affective commitment as the outcome variable, because employees are undoubtedly on the receiving end of HRM initiatives (Wright and Haggerty, 2005). In a review, Paauwe and Richardson (1997) distinguish between two kinds of outcomes of HRM policies: financial outcomes such as output of the organization, market share, profit, market value, but also non-financial factors such as sick leave, turnover, motivation and satisfaction. (see also Delery and Shaw, 2001; Guest, 1997). Further research should take into account both soft and hard aspects of business performance on the organizational level.

In sum, this study provides an empirical test of two extensions of the “high commitment HRM-affective commitment” relationship. By focusing on the process of HRM (features of HRM systems: distinctiveness and consistency), and the shared perceptions of high commitment HRM, progress was made in the area of affective commitment of employees.

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