



High performance work practices in the health care sector: a Dutch case study

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Abstract

Purpose – This paper aims to present an empirical study of the effect of high performance work practices on commitment and citizenship behaviour in the health care sector. The theory suggests that individual employees are willing “to go the extra mile” when they are given the opportunity to develop their abilities and to participate, and when they are motivated.

Design/methodology/approach – The data were gathered in a Dutch general hospital using employee questionnaires. Medical specialists were not included in the study.

Findings – The results of the study suggest that employee development (e.g. skills training, general training, and task enrichment) and employee involvement (e.g. job autonomy, participation in decision making) are important HR practices in creating a high performance work climate in a health care organisation.

Research limitations/implications – The data come from one hospital and the analysis is cross-sectional. However, the importance of the study lies in its focus on the individual employee perspective rather than the organisational level analyses which currently predominate in the HRM and performance debate.

Practical implications – The training and development of health care employees can increase their affective commitment. Increasing employee involvement can also help stimulate citizenship behaviour.

Originality/value – The paper looks at the non-profit sector, whereas the majority of previous HR research has focused on multinational companies.

Keywords Human resource management, Job satisfaction, Citizenship, Employees behaviour, Health services, The Netherlands

Paper type Research paper

Testing the added value of human resource management (HRM) to firm performance has become increasingly popular since the mid-1990s. The early work of Arthur (1994), Huselid (1995) and MacDuffie (1995) indicates that HR practices have a significant impact on firm performance. More than a decade later, over 100 studies on the added value of HRM have been published in this field (Boselie *et al.*, 2005). However, previous research has been dominated by organisational-level analyses while little or no attention has been devoted to the individual employee (Guest, 1999). Research typically focuses on high performance work practices and their impact on firm performance, reflected in such things as: employee turnover, absenteeism, productivity, quality, sales, market share, profits and market value (Boselie *et al.*, 2005). There is a need for micro-level research that looks at the actual impact of HR interventions on employee attitudes and behaviours (Guest, 1999). Tsui *et al.* (1997) and Peccei (2004) represent this

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new stream of micro-research in HRM which emphasises the employee perspective and employee perceptions.

This study looks at the micro level of employees in the Dutch health care sector. The reasons for this are as follows. First, the majority of empirical research into HRM and performance to date has been conducted in large multinational companies (Keegan and Boselie, 2006), all of which are profit oriented. We therefore know little about HR effectiveness in the public sector (Bach and Kessler, 2007; Harley *et al.*, 2007). Second, although there is a growing body of literature examining management reforms in the public health care sector, the role of human resource management has largely been overlooked in the debate (Modell, 2000). These health care reforms are focused on structural change, cost containment, the introduction of market mechanisms and customer choice (Buchan, 2000). On the whole, information regarding HRM effectiveness in the health care sector is very limited (Buchan, 2004). Third, it is estimated that the health care sector will become the largest sector in The Netherlands in terms of employee numbers. More than 1 million people are employed in the Dutch health care sector (12 per cent) out of a total workforce of 8.2 million (Statistics Netherlands, 2006). Recent changes in governmental policies relating to health care organisations, together with the introduction of free market principles and customer orientation, are putting this sector under increasing financial pressure. Management reforms in the Dutch health care sector are comparable to developments in such countries as the UK and the US (Bach and Kessler, 2007).

The aim of this paper is to examine high performance work practices (HPWPs) in the Dutch health care sector, focusing on the individual employee. The central research question addressed in this paper is: What is the impact of HPWPs on affective employee commitment and organisational citizenship behaviour in the Dutch health care sector? The data comes from a large general hospital in Holland and was collected in 2005 through a questionnaire. This paper first gives an overview of HRM in health care management based on existing literature.

Human resource management in health care

The majority of HR health care research has been conducted in the UK and the US. Corby (1992), for instance, looks at industrial relations developments in the NHS. She concludes that from the 1980s to the 1990s in the UK there was a move from national to local bargaining. This transition affects negotiations and creates more leeway in HRM at organisation level, for example with regard to pay. Bach (1998) examines the reform of NHS employment practices. Case study evidence indicates the difficulties involved in making radical changes in HR practices. Despite radical changes in working practices, the author's findings are that governmental influence, which reduces management autonomy at NHS trust level, imposes severe limitations on the options available for taking a more strategic HRM approach. The overall conclusion in the late 1990s was that central government remains a powerful and influential actor as far as health care organisations and their HR policies for managing people in times of reforms are concerned. In their research, Boyne *et al.* (1999) compare the pattern of human resource management in public and private organisations and suggest the following improvements:

- more support for performance related pay in the private sector;
- less involvement in reward practices in the public sector;

- more support for lifetime job security in the public sector;
- more support for flexible HRM policies in the private sector;
- more involvement in training and development in the public sector;
- more involvement in employee participation practices in the public sector; and
- more support for equal opportunities and employee welfare policies in the public sector.

These results indicate that there were significant differences between the public and the private sector with regard to HR in the UK in the 1990s. The private sector appears to favour “hard” HRM (e.g. variable pay linked to individual employee performance), while the public sector takes a relatively “soft” HRM approach with an emphasis on employment security and employee participation. A study conducted by Buchan (2000) looks at the changing face of the NHS HR function. His findings suggest there has been a transition from a staff welfare orientation to a business orientation, from a generalist service to a specialist function, from training to appraisal and development, from collective relations with staff to individualised relations, and from negotiation to consultation and communication. Eaton (2000) examines the link between HRM, work organisation and patient care quality in US long-term care settings. Using the high performance model and case study methods she identifies three distinct systems of HR and nursing-home management: traditional low-service quality, high service quality medical rehabilitative, and new paradigm regenerative. Eaton (2000) proposes a model in which the structure of the organisation, its work culture and HR practices are shaped through:

- local environment, labour market and regulation;
- competitive strategy; and
- values and beliefs.

Truss *et al.* (2002) studied the HR function within an NHS trust and a bank over a period of seven years using both interviews and questionnaires. The authors conclude that there are major differences in the HR function based on sectoral differences (public versus private; health care versus financial institution). The NHS trust appears to be far more restricted by central NHS HR strategies and targets than the bank. “Any strategy making enacted at a local level therefore takes place within the constraints of the broader framework of the NHS (Truss *et al.*, 2002, p. 60).” The findings of a Dutch empirical study on the impact of HRM on performance suggest differences between hospitals and local government (both public sector) on the one hand and hotels (private sector) on the other (Boselie *et al.*, 2003). Hospitals function in a highly institutionalised environment that restricts the degree of freedom available to HR policies and practices. Finally, Buchan (2004) looks at health sector reform in general. The author emphasises the importance of selective recruitment and selection for organisation performance in terms of reduction in mortality rates, needlestick injuries and infections, and improvements in quality of care and patient satisfaction.

The health care sector appears to be in a state of transition towards decentralisation and towards a model for improving “business” performance. Nevertheless, the empirical studies suggest that substantial influence exists with regard to the specific institutional environment and context. These transitions, in combination with contextual limitations,

affect both the employment relationship and HRM. The next section proposes a theoretical approach to studying HRM in health care.

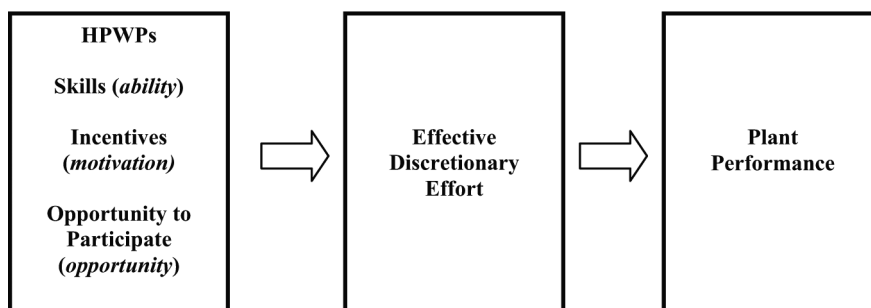
Theoretical background and hypotheses

The AMO model[1] presents a specific way of defining HRM and focuses on those HR practices that increase effective discretionary behaviour amongst employees. This has the effect of making workers feel highly committed to their organisation, their department, their colleagues and their job, and are willing to go the extra mile. This is also known as organisational citizenship behaviour (OCB). OCB is “employee behaviour that is above and beyond the call of duty and is therefore discretionary and rewarded in the context of an organisation’s formal reward system” (Konovsky and Pugh, 1995, p. 656). The service quality literature suggests that in order to deliver high levels of customer quality, organisations must identify, measure, and manage the internal elements that produce it (Hallowell, 1996). In the health service there is a close link between employee outcomes (e.g. job satisfaction) and customer service (e.g. customer satisfaction). Going the extra mile in health care is directly linked to customer care (Van Wijk, 2007) and therefore worthwhile pursuing. In the model, effective discretionary effort is a function of the employees’ abilities, motivation and opportunity to participate (Appelbaum *et al.*, 2000). A visual representation of the AMO model is shown in Figure 1.

Boxall and Purcell (2003, p. 20) observe that according to the AMO model people perform well when:

- “they are able to do so (they can do the job because they possess the necessary knowledge and skills)” (= abilities);
- “they have the motivation to do so (they will do the job because they want to and are adequately incentivised)” (= motivation); and
- “their work environment provides the necessary support and avenues for expression (for example, functioning technology and the opportunity to be heard when problems occur)” (= opportunity to participate).

The AMO model suggests that specific HR practices – often termed high performance work practices or HPWPs (Shih *et al.*, 2006) – enhance the three main components of the model. HPWPs that enhance Abilities include: skills training, general training, job enrichment and coaching. Typical HPWPs that enhance motivation include: high wages, fair pay and pay for performance. Finally, HPWPs that enhance the opportunity to



Source: Appelbaum *et al.* (2000, p. 27)

Figure 1. AMO-model

participate include: employee involvement in decision making, participation, job and team autonomy, and decentralisation.

In summary, high performance work practices (HPWPs) that stimulate employee ability, employee motivation and employee opportunity to participate (AMO) are deemed to contribute to employee discretionary effort. In turn, discretionary effort is thought to form the basis for efficiency, flexibility and social legitimacy in the organisation (Boxall and Purcell, 2003).

The AMO model suggests that HRM can contribute to critical HR goals (for example labour productivity and flexibility) and suggests that this relationship is mediated by employee attitudes and behaviours (e.g. Appelbaum *et al.*, 2000). In other words, HR practices affect employee attitudes (for example, employee commitment and motivation) and employee behaviours (for example, organisational citizenship behaviour and turnover), and these attitudes and behaviours in turn have an impact on efficiency, flexibility and legitimacy. Boxall and Macky (2009) provide an extensive overview of the high performance work systems literature. Their integrative research framework includes:

- employment practices (e.g. selective recruitment and selection) and work practices (e.g. self-managing teams);
- the impact of context in particular industry-grounded characteristics such as those described in MacDuffie's (1995) study of the automobile industry; and
- direct effects of AMO components (the cognitive path to operating outcomes) and indirect effects of AMO components (the motivational path to operating outcomes).

This study regarding the health care sector is focused on the impact of employment practices on employee affective outcomes. This is what Boxall and Macky (2009) call the motivational path, which mainly looks at the influence of how the AMO model affects individual performance. The impact of HR systems at a more collective level, for example HPWS (high performance work systems) helping to build organisational capabilities and influencing organisational culture, is not taken into account here.

Allen and Meyer's three-component model of commitment (Allen and Meyer, 1996) is a popular framework for defining employee commitment. This model distinguishes three components of commitment: affective commitment, normative commitment and continuance commitment. Empirical evidence suggests that affective commitment is positively associated with other desirable outcomes (e.g. intention to stay, employee presence, OCB, employee health, employee well-being), while in some cases the other two commitment components reveal negative associations with outcome measures (Meyer *et al.*, 2002). This is why the focus in this study is on affective commitment only. For example, continuance commitment – attachment to the organisation due to a lack of alternatives – might be the result of excellent remuneration (golden handcuffs) without there being an inspirational and motivational work environment. Affective commitment is defined by “the identification with, involvement in, and emotional attachment to the organisation” (Allen and Meyer, 1996). Again, service quality towards customers might be stimulated by high employee commitment (Hallowell, 1996).

Empirical evidence suggests that HPWPs have a positive impact on affective commitment. O'Driscoll and Randall (1999) find a positive relationship between perceptions of pay and affective commitment. Appelbaum *et al.* (2000) find positive relationships between perceived pay for several HPWPs (pay for performance, pay is

fair, autonomy and opportunity to participate) and commitment. Chang (1999) finds a positive relationship between company training and organisational commitment. Caldwell *et al.* (1990) and Deery *et al.* (1994) find empirical evidence for a positive relationship between reward systems and organisational commitment. Godard (2001) finds comparatively strong relationships between employee involvement and commitment. The study by Whitener (2001) shows a positive relationship between high performance work practices (including staffing, appraisal, training and rewards) and organisational commitment. Finally, Macky and Boxall (2007) find clear evidence of a positive relationship between HPWS practices and attitudinal variables including organisational commitment. Their findings suggest:

- H1a.* High scores on perceived HPWPs that enhance Abilities (e.g. skills training, general training, coaching) are positively related to high affective commitment.
- H1b.* High scores on perceived HPWPs that enhance Motivation (e.g. high wages, fair pay, and pay for performance) are positively related to high affective commitment.
- H1c.* High scores on perceived HPWPs that enhance Opportunities to Participate (e.g. autonomy, employee involvement in decision making) are positively related to high affective commitment.

Social exchange theory (Blau, 1964) focuses on the relationship between the organisation and its employees. Underlying this theory is the idea that “employees form general perceptions about the intentions and attitudes of the organisation toward them from policies and procedures enacted by individuals and agents of the organisation” (Whitener, 2001, p. 517). In other words, enacted HR practices send messages to employees that will strengthen or weaken the relationship between the employee and the organisation. High performance work practices are thought to positively affect this relationship and make employees more willing to put extra effort into their job (Godard, 2001). Godard (2001) reveals a positive relationship between employee involvement and citizenship behaviour. Tsui *et al.* (1997) find that the mutual investment approach (an example of a typical high performance/high commitment HR systems approach) has a stronger impact on OCB than the other approaches in their study. As Boon’s (2008) study shows, there is a positive relationship between employee participation and OCB, and a positive relationship between selective recruitment and selection and OCB. These findings suggest:

- H2a.* High scores on perceived HPWPs that enhance abilities (e.g. skills training, general training, coaching) are positively related to high levels of organisational citizenship behaviour (OCB).
- H2b.* High scores on perceived HPWPs that enhance motivation (e.g. high wages, fair pay, and pay for performance) are positively related to high levels of organisational citizenship behaviour (OCB).
- H2c.* High scores on perceived HPWPs that enhance opportunities to participate (e.g. autonomy, employee involvement in decision making) are positively related to high levels of organisational citizenship behaviour (OCB).

Affective commitment and organisational citizenship behaviour are relevant outcome indicators for the Dutch health care sector. These outcomes reflect employee commitment to the organisation, colleagues and clients, and employees' willingness "to go the extra mile" in order to achieve excellent performance in terms of efficiency, quality and flexibility. At a time when cost effectiveness, quality service and organisational flexibility are crucial, high performance work practices can make all the difference in the health care sector (Harley *et al.*, 2007).

Method

The data are derived from research conducted among individual employees working in a hospital in The Netherlands. This general hospital was founded 425 years ago. It has a staff of around 2,500 employees and 165 medical specialists. In 2005, the organisation's total annual budget was €136 million. Hospitals in The Netherlands employ between 1,000 and 5,000 employees, so this hospital is of an average size (Personeel in Beeld, 2004).

Employee sample

This cross-sectional study looks at six departments comprising non-medical staff (e.g. HR professionals) and health care personnel (e.g. nurses). Medical specialists are not included in this study because at this particular hospital all the medical specialists are self-employed. A survey, in Dutch, was sent to 365 employees. A total of 157 questionnaires were returned giving a 43 per cent response rate. In total, 119 women and 38 men participated in the study. The average age was 41 and the majority of respondents had a higher technical/vocational educational background (52 per cent). A total of 10 per cent of respondents had an academic degree, 26 per cent had had an intermediate technical/vocational education, and the remainder had a high school diploma or had a lower technical-vocational education (12 per cent). Table I shows an overview of the key characteristics of the respondents in comparison with the population as a whole and to the Dutch hospital sector as a whole. The average tenure within the hospital is 12 years and employees work an average of 28 hours a week. This means there are a significant number of people working part-time which is typical in the Dutch health care sector.

Measures

High performance work practices. In this study the capacity of HPWPs to foster abilities, motivation and the opportunity to participate is measured using specific statements that have been taken from previous empirical studies, in particular from

	Sample	Population	Hospital sector ^b
Gender (% women)	76	83	82
Employee age (years)	41	43	37
Education level (% high) ^a	62	56	53
Company tenure (years)	12	16	15

Notes: ^aHigh = higher technical/vocational education and academic degrees; ^bData from Personeel in Beeld (2004)

Table I.
Key characteristics of the sample, the population and the Dutch hospital sector

research conducted by Huselid (1995) and by den Hartog and Verburg (2004). These scales were converted from organisational-level items (e.g. “what is the average number of hours of training received by a typical employee over the last 12 months” Huselid, 1995, p. 646) into individual employee-level items (e.g. “the organisation offers opportunities for training and development”). The core of the ability construct is based on perceived opportunities for skills training, general training, personal development, coaching, and task variety. An example of a specific statement would be: “the organisation provides excellent opportunities for personal skills development”. It should be noted that there is a difference between perceived HR practices and actual HR practices (or implemented practices). The concept of abilities is measured by seven items using a five-point Likert scale where 1 represents completely disagree and 5 represents completely agree. The concept of Motivation is built on ideas of high wages, fair pay and pay for performance. A specific statement within the motivation construct would be: “in my opinion, my payment is fair in comparison with that of my immediate colleagues”. Motivation is measured by five items, again using a five-point Likert scale (1 = completely disagree and 5 = completely agree). Finally, the concept of opportunity to participate comprises such things as employee influence, involvement in decision making and job autonomy. An example of a statement within this construct is: “I am involved in the decision making in the selection process for new colleagues”. Opportunity to participate is measured by nine items using a five-point Likert scale (1 = completely disagree and 5 = completely agree).

Principal component analysis, using a varimax rotation with Kaiser normalisation, shows a three-factor AMO structure reflected in the scree plot and the eigenvalues. Factor 1 represents the high performance work practices that enhance employee abilities. The seven-item ability construct shows a coefficient of internal consistency of 0.80 (Cronbach α). Factor 2 represents the high performance work practices that enhance employee motivation. The five-item motivation construct shows an internal consistency of 0.78. Finally, Factor 3 represents the high performance work practices that enhance the opportunity to participate for individual employees. The nine-item opportunity to participate construct shows an internal consistency coefficient of 0.90. The full item list, the overview of the factor structure and the consistency measures are available from the author on request.

Affective commitment. The concept of affective commitment was measured using a Dutch translation by De Gilder *et al.* (1997) of Allen and Meyer’s (1996) original construct. Affective commitment is measured by eight items using a five-point Likert scale (1 = completely disagree and 5 = completely agree). De Gilder *et al.* (1997) found an internal consistency of 0.83 (Cronbach α). The internal consistency of the construct in this study is good (Cronbach $\alpha = 0.76$). The item list and the consistency measures are available from the author on request.

Organisational citizenship behaviour. The concept of organisational citizenship behaviour was measured using a Dutch translation by Andreas and Van Yperen (2002) of Morrison’s (1994) 20-item list. OCB is measured by these 20 items on a seven-point Likert scale (1 = completely disagree and 7 = completely agree). Andreas and Van Yperen (2002) found an internal consistency of 0.92 (Cronbach α). The internal consistency of the construct in this study is good (Cronbach $\alpha = 0.84$). The full item list and the consistency measures are available from the author on request.

Control variables. Five control variables were taken into account: gender (1 is female and 0 is male), employee age (in years), educational level (1 is academic degree or higher technical/vocational level and 0 is other), company tenure (number of years employed at this hospital), and average number of working hours per week.

Analysis

The data were analysed using SPSS. A missing value analysis revealed less than 1 per cent missing values in the total dataset. A pilot study was used to check whether the survey was understandable for the respondent group and whether the length of the survey was appropriate. The hypotheses were tested using regression analysis (the ordinary least squares (OLS) method).

Results

Descriptive statistics

Table II shows means, standard deviations, and correlations. The average score on the HR concept of motivation is substantially lower than the average scores on abilities and opportunity to participate. This might be due to the fact that wages in the health care sector are often perceived as being much lower than the wages in profit-making organisations (Boselie *et al.*, 2003). The standard deviation of the tenure variable is relatively high. This indicates a non-normal distribution.

The correlations in Table II show the following significant relationships. Affective commitment is positively related to: organisational citizenship behaviour, HPWPs that enhance abilities, HPWPs that enhance Motivation, HPWPs that enhance opportunity to participate, employee age, company tenure, and average working hours per week. The results with respect to OCB, employee age and tenure are in line with previous empirical findings (see meta-analysis of Meyer *et al.*, 2002). Affective commitment is negatively related to gender which indicates substantially lower affective commitment levels for women than men in this study. Organisational citizenship behaviour is positively related to affective commitment and HPWPs that enhance employees' opportunity to participate.

Findings

Table III presents the regression analysis results for *H1a* to *H2c*. Model 1 suggests a significant relationship between tenure and affective commitment. In other words, employees who have worked for a longer period at the hospital are more committed to the organisation than those who have been there for a shorter time. The equation shows that HPWPs that enhance Ability have a positive relationship with affective commitment. However, the change in explained variance compared to a model without the three AMO components ($\Delta R^2 = 0.05$ at a significant level) is relatively low. Model 2 presents the results with regard to OCB. The HPWPs that enhance opportunity to participate show a strong relationship with OCB which indicates that employee participation is an important HR practice in the eyes of the respondents. The variable working hours component is also positively related to OCB. Overall, HPWPs that enhance Abilities are positively related to employee commitment and HPWPs that enhance opportunity to participate are positively related to OCB.

In general, HPWPs that enhance motivation do not appear to make a significant contribution to affective commitment and OCB in the case of this Dutch hospital. This

Variables	Means	SD	1	2	3	4	5	6	7	8	9
1. Commitment	2.86 ^a	0.62 ^a	1								
2. OCB	5.23 ^a	0.61 ^a	0.34	1							
3. Abilities	3.30 ^a	0.59 ^a	0.22	0.01	1						
4. Motivation	2.86 ^a	0.68 ^a	0.18	0.15	-0.03	1					
5. Opportunity	3.50 ^a	0.66 ^a	0.19	0.29	0.34	0.18	1				
6. Education	0.62 ^b	0.49	0.09	0.03	0.01	0.11	0.22	1			
7. Gender	0.74 ^c	0.44	-0.27	-0.01	-0.18	-0.16	-0.21	-0.08	1		
8. Age	41.17	9.80	0.30	-0.04	-0.03	0.02	0.06	0.04	-0.15	1	
9. Tenure	12.00	9.96	0.43	0.06	-0.10	0.08	-0.06	0.06	-0.12	0.55	1
10. Hours	28.96	6.84	0.16	0.14	0.25	0.02	0.13	0.01	-0.41	-0.16	-0.13

Notes: *n* = 157; All correlations greater than or equal to 0.16 are significant at the 0.05 level; those ≥ 0.22 are significant at the 0.01 level, and those ≥ 0.28 are significant at the 0.001 level; Scales: Commitment, A, M and O five-point scale, OCB seven-point scale, ^aaverage sum scores; ^b1 = academic degree or high technical/vocational education, 0 = others; ^c1 = female, 0 = male; Employee age in years, Tenure in years and Hours in hours

Table II. Means, standard deviations, and correlations for all variables

Variables	Commitment Model 1 stand.coefficients	OCB Model 2 stand.coefficients
Education	-0.03	-0.06
Gender	-0.08	0.13
Age	0.08	-0.10
Tenure	0.41 ***	0.16
Hours	0.14	0.19*
Abilities	0.18*	-0.12
Motivation	0.12	0.10
Opportunity	0.11	0.34 ***
Adj. R^2	0.287	0.103
ΔR^2	0.050	0.101
F	8.832 ***	3.247 **
Sig. F change	0.005	0.000
n	156	156

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table III.

Results for regression analyses for affective commitment and OCB

could be due to the institutionalisation of pay systems through collective bargaining agreements (CBAs) and legislation in The Netherlands.

H1a and *H2c* are supported. High scores on perceived HPWPs that enhance abilities (e.g. skills, general training, coaching) are positively related to high affective commitment (*H1a*) and high scores on perceived HPWPs that enhance opportunities to participate (e.g. autonomy, employee involvement in decision making) are positively related to high organisational citizenship behaviour (*H2c*). *H1b*, *H1c*, *H2a* and *H2b* are rejected.

Discussion

For organisations in the public health care sector, management reforms are at the top of the agenda (Modell, 2000). Cost effectiveness (e.g. labour productivity) and service quality (e.g. number of customer complaints, customer satisfaction) often determine management decisions. Waiting list management provides an example of service quality monitoring in health care is (Vissers *et al.*, 2001). In The Netherlands, the government requires that hospitals put the waiting lists of all their in-house medical specialisms on the internet. This means customers can make a more informed choice and the actual "production" of hospitals is monitored in a highly transparent manner. Another example of fundamental changes in the Dutch health care system can be found in the new collective health care insurance system that came into effect on 1 January 2006. In this new system there is a close link between the actual services delivered to an individual customer and the bill that a health care provider sends to an insurance company. The so-called *diagnose behandel combinaties* (DBC or Diagnosis Treatment Combinations) represent standardised sets of lists for employee tasks towards an individual client. These DBCs not only summarise employee tasks, but link these tasks to the actual rates for each task as well.

The performance of a hospital depends on employee commitment and the willingness of individuals to perform extra tasks. This study shows that there is a

positive relationship between high performance work practices that enhance abilities – for example, through skill development in cost awareness and through opportunities for task enrichment – and affective commitment. The study also demonstrates a positive relationship between creating opportunities for employee participation – for example through job autonomy and through employee involvement in decision making – and organisational citizenship behaviour. Personal development and employee participation are HR themes that can help Dutch health care organisations to take a step forward in increasing efficiency (e.g. cost awareness, higher productivity), flexibility and social legitimacy (e.g. employees have a say in what happens within the organisation). The impact of high performance work practices on performance in the health care sector appears to be highly relevant outside the Netherlands as well. This is reflected, for example, in Eaton's (2000) work on health care in the US and the research carried out by Buchan (2004) into Britain's NHS. The empirical findings thus have potential relevance for health care in other countries.

The results of this study suggest that the optimal choice of specific HR interventions depends on the desired outcome. When affective employee commitment is required, for example due to high employee turnover risks, high performance work practices that enhance Abilities are considered to be the right choice. Providing employees with opportunities for further personal development through skills and general training stimulates affective commitment. When organisational citizenship behaviour is required, for example as a result of temporary production pressure through seasonal effects (e.g. winter illnesses, seasonal influenza), HPWPs that enhance opportunity to participate are deemed to be important. This might also imply that when other HR outcomes are relevant to the organisation (e.g. employee absence, stress, employee satisfaction, motivation, trust and perceived organisational justice) different HR interventions in the AMO model should be applied in order to achieve the desired business goals. There is no single best way for HR to increase performance. It depends on a number of things including the specific organisational goals and context.

A closer look at the impact of HPWPs that enhance motivation shows no significant effects in the regression analyses. This might be the result of the institutionalised context in which Dutch hospitals operate (Paauwe and Boselie, 2003). The institutional mechanisms that affect HRM, and in particular HR practices relating to payment, are shaped by Dutch legislation (e.g. statutory minimum wage, unemployment benefit and sick pay) and Dutch collective bargaining agreements at sector level. This means there is only limited flexibility with regard to pay issues in the Dutch health care sector. Broadly speaking, the health care sector may be characterised by contextual limitations that exist not only in The Netherlands but in the UK as well (for an overview, see the section entitled Human Resource Management in Health Care earlier in this paper). HRM trends in health care appear to show a slow process of change, in particular with respect to core HR themes regarding employee payment and rewards.

Effective HR interventions for achieving desired goals can be expensive. The HR investment component of such an intervention is often not taken into account. The search for effective but also cost efficient interventions to stimulate affective commitment or OCB may prove to be a challenging and difficult task. Training and development for stimulating affective commitment are often expensive and time consuming. Alternative methods of enhancing Abilities to stimulate commitment might be found in HRM focused on learning on the job, coaching programmes and

mentorships. These HR practices, as part of the abilities building block, can be effective and are not necessarily expensive.

Limitations

The first limitation is linked to the nature of this study. This is a cross-sectional study and the results in terms of potential causal effects of high performance work practices on employee performance should be interpreted carefully. It is almost a cliché in HR research to suggest the use of longitudinal approaches. These are also frequently suggested in empirical studies (Boselie *et al.*, 2005). Unfortunately, longitudinal research is time-consuming and on occasion proves almost impossible due to organisations' lack of willingness to cooperate with researchers on a long-term basis in conducting this type of analysis. There are of course some excellent examples of longitudinal studies that have proved worthwhile (e.g. van Veldhoven, 2005).

The second limitation is directly related to the AMO theory as proposed in this study. High performance work practices approaches are typically organisation level oriented. We know little about applying this type of approach at the individual employee level as proposed by Appelbaum *et al.* (2000). Do employees perceive the effect of the AMO model at organisation level in a similar way to that proposed by authors (Bailey, 1993)? The work of Godard (2001) shows that the underlying unitarist assumptions of the AMO model – unitarist used here in the sense of what is good for the employee is automatically good for the employer and vice versa – are incorrect with regard to some practices or situations. For example, employee participation and performance related pay can have negative side-effects on employees in terms of stress and burn-out which ultimately has an adverse impact on commitment and OCB as well (Godard, 2001; Peccei, 2004; van Veldhoven, 2005).

The third limitation is linked to this last point. Does the AMO model tell us the whole story with respect to the shaping of the employment relationship? The AMO approach suggests a very specific system of HR practices that are intended to increase employee performance. HRM is just one component of the context that shapes employment relationships in an organisation (Boxall and Macky, 2009). MacDuffie (1995) emphasises the impact of other systems that are relevant in this context, for example work systems that are linked to the way jobs are organised and integrated with other organisational systems, such as technological systems and production systems. Examples of work systems include teamwork, quality circles, job rotation and job design. Others argue that the role played by direct supervisors in shaping HRM is crucial as well (den Hartog *et al.*, 2004). The type of leadership style could also play a key role when examining employee perceptions of HPWPs since most HPWPs are implemented by direct supervisors. Boxall and Macky (2009) summarise a number of important lessons for future high performance work systems approaches:

- The nature of the industry (e.g. the automobile industry versus the steel industry; mass services versus professional services in the service sector) significantly affects the nature of high performance work systems.
- High performance work systems involve two broad types of practices: work practices and employment practices.
- High performance work systems have multilevel impacts including effects on individual employees and effects on the social climate in an organisation.

- High involvement work systems (HIWS) and the high commitment model (HCM) are the two main variations of high performance work systems approaches. HIWS focuses mainly on work practices and HCM on employment practices.
- High involvement work systems approaches take as their starting point the “O” in the AMO model since “changes in the opportunities (O) created by work redesign lead logically to implications for the ability (A) and motivation (M) dimensions” (Boxall and Macky, 2009, p. 15).
- Future research should further explore HPWS and work intensification as Godard (2001) suggests above.

There are several additional challenges for future research. First, it would be interesting to test this model in different health care organisations and compare the overall results. This brings us back to the notion of context. In other words, to what extent can this model be applied to other organisations, not only within the Netherlands but in other countries as well? Second, the real challenge is to link the AMO model to critical HR goals (efficiency, flexibility and social legitimacy) using HR outcomes (employee attitudes and behaviours) as mediating variables between high performance work practices and critical HR goals. Third, it might prove fruitful to extend the AMO model using other relevant constructs that potentially influence effective discretionary effort, such as leadership styles (the role of the direct supervisor). Finally, future HR research should focus on other employee groups including management, administrative support staff, nurses and medical specialists.

Conclusion

The results suggest that affective commitment can be improved by increasing HPWPs that enhance ability. The results also imply that OCB can be increased by HPWPs that enhance opportunity to participate. In particular, increasing employee involvement and influence is interesting and relevant since implementing these interventions does not have to cost a great deal. Where there is a relatively high percentage of highly educated workers (62 per cent in the sample and 56 per cent in the hospital population) stimulating employee involvement might prove crucial. For example, employee involvement in the recruitment and selection of new colleagues and employee involvement in decision making on departmental issues are potentially powerful HR interventions for creating a high performance work climate among employees. Stimulating employee commitment can also be achieved by introducing mentorships that are a potential motivator due to the fact that they create knowledge transfer for the coach and the pupil. Affective commitment and organisational citizenship behaviour are crucial for the health care sector since a health care organisation's most important asset is its human assets. In a time of growing market pressure and quality service focus it is important to develop and foster a healthy workforce within the organisation, who are not only committed to their jobs, the organisation, their colleagues and clients but are also willing to carry out extra tasks when required.

Note

1. AMO represents the employees' abilities, motivation and opportunity to participate in an organisation.

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