
Perceived HRM practices and organisational citizenship behaviour: a case study of a supply chain management solutions provider

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Abstract: This paper assesses the impact of perceived HRM practices on organisational citizenship behaviour (OCB) and whether leader membership exchange (LMX) mediates this relationship. The required research data were retrieved from four different departments within a logistics and supply chain management organisation. The results show that there is a significant relationship between the HRM practices as perceived by a subordinate and their level of organisational citizenship behaviour. The relationship that subordinates have with their frontline manager (LMX) acts as a significant mediator. In the final section, of this paper the findings are discussed and recommendations for future research and practical implications are given.

Keywords: organisational citizenship behaviour; OCB; perceived HRM practices; leader membership exchange.

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1 Introduction

The added value that human resource management (HRM) can offer an organisation has been extensively researched since the 1990s, revealing an influential relationship between HRM and the performance of an organisation (Huselid, 1995; Guthrie, 2001). With regards to the factors which might play a determining role in the HRM-performance issue, Guest (1997) argues that any increase in organisational performance depends on the employment of highly contributing staff. It is also important for the employees to have certain behavioural characteristics (which should be monitored) that can help the organisation to attain the objectives set. It is the perceived HRM practices that determine the positive 'employee outcomes' rather than the practices themselves. In other words, the implementation or optimisation of specific HRM practices does not automatically result in staff adjusting their behaviour. There is a nexus between HRM practices and employee outcomes; the employee's perceptions of the HRM practices determine their ultimate attitude and conduct.

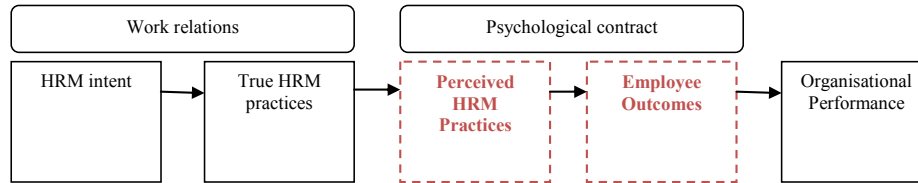
HRM protocols have an effect on (organisational) performance under the influence of 'employee outcomes' (Wright and Nishii, 2007). These employee outcomes reflect the behaviour [cognitive or affective behaviour, according to Lee and Allen (2002)] displayed by the employee as a consequence of their interpretation of the HRM practices. The demonstration of discretionary behaviour is one of the most important employee outcomes (Wright and Nishii, 2007).

The largest part of research into strategic HRM (SHRM) is focused on the relationship between 'paper HRM-policy' and organisational strategy. There is still very little known about implementation in practice and employee perceptions in terms of the implemented HRM practices. Wright and Nishii (2007) have discussed the uniform implementation of 'actual HRM practices' (and the associated perceptions) and have asked what the effect is of the frontline manager in this context who in many cases is responsible for the implementation and operationalisation of HRM staff policy. The role of the (frontline) manager is considered to be significant within the relationship between HRM practices and behaviour (e.g., Purcell and Hutchinson, 2007). However, no direct research has been undertaken to date into the correlation between the concepts of perceived HRM practices and organisational citizenship behaviour (OCB) under the influence of leader membership exchange (LMX) and the strength of the mutual relationships.

2 Perceived HRM practices

HRM can be approached at different levels of analysis (Wright and Haggerty, 2005). The first level is the intended or developed level, the second is the actual or true HRM level, and the third is the perceived level. By way of illustration, we have included the SHRM as drafted by Wright and Nishii (2007), in which the dotted part is the area on which this study concentrated.

Employees see HRM activities as the organisation's personalised commitment towards the employee and (in case of a positive perception) the employee shows reciprocal behaviour in response through a positive attitude and associated behavioural characteristics (Hannah and Iverson, 2004).

Figure 1 The SHRM model of Wright and Nishii (2007) (see online version for colours)

3 Organisational citizenship behaviour

Organ is generally regarded as having laid the foundations for the OCB theory. His definition of OCB can therefore be taken as the leading one. This definition is as follows: OCB concerns the individual, independent behaviour that is not directly or explicitly acknowledged through the formal remuneration system and which through the various types of behaviour that make up OCB conjunctively leads to organisational effectiveness and efficiency (Organ, 1988).

An employee's citizenship behaviour can be subdivided according to behaviours for the benefit of the individual (Stoffers et al., 2014) and behaviours in service of the organisation (Lee and Allen, 2002; Williams and Anderson, 1991). Behaviour focused on the individual is mainly characterised by the display of helpful conduct (altruism) and the demonstration of positive role behaviour (courtesy) in which interpersonal relationships are pivotal (Podsakoff et al., 2000).

Behaviour oriented towards the organisation, on the other hand, focuses on (and contributes to) the success of the organisation as a whole (Williams and Anderson, 1991). Behavioural characteristics such as the adherence to rules, display of loyalty and demonstration of innovative and creative actions come into this category. Podsakoff et al. (2000) refers to civic virtue, job dedication and conscientiousness here. Finkelstein (2011) also makes this distinction in her research into the interaction between motivation and OCB. She distinguishes between OCB behaviour oriented towards the organisation as a whole (OCB-O) and behaviour directed towards specific individuals or groups within the organisation (OCB-I).

4 Leader membership exchange

Dienesch and Liden (1986) originally identified three LMX dimensions: task-related behaviour (contribution), mutual loyalty and affection. They proposed that an LMX relationship may comprise one, two or three of these dimensions conjunctively. In 1998, Liden and Maslyn added a fourth dimension: professional respect. This dimension reflects the degree to which the LMX partners have built a reputation.

LMX differs from other leadership theories in its explicit focus on the unique relationship that a manager engages in with each staff member separately (Gerstner and Day, 1997; Liden et al., 1997). Within an LMX relationship, leaders develop an individual (exchange) bond with unique characteristics and features with each employee. The employee and leader's displayed demeanour is strongly influenced by the quality of this mutual LMX relationship (Gerstner and Day, 1997; Liden et al., 1997).

5 The relationship between perceived HRM practices, OCB and LMX

Frontline managers play an essential role in the success, or failure, of HRM practices (Wang and Khilji, 2006; Uhl-Bien et al., 2000). Wang and Khilji (2006) conclude, however, that in many cases management falls short in the implementation and/or continuation of HRM policy and that policy often only exists on paper. A crucial issue is hereby overlooked: the individual employee's perceptions and degree of satisfaction with the HRM practices (HRM satisfaction) is essential if a positive relationship between HRM and performance is to be achieved (Walton, 1985).

The ultimate behaviour of employees (including OCB) is influenced by the HRM policy they experience and by the associated leadership style of their frontline manager (Purcell and Hutchinson, 2007). Recent studies by Alfes et al. (2013) arrived at the same conclusion by proposing that Perceptions of HRM practices are simply a predictor of OCB behaviour. The level of OCB behaviour, however, is influenced by the relationship the employee has with their frontline manager. The employee's perceptions need to be used as the starting point, as it is exactly these perceptions that are a good predictor of ultimate role behaviour (Wright and Nishii, 2007).

6 Research question and hypotheses

The study focused on the relationship between employees' perceptions of HRM practices on the one hand, and the subsequent OCB behaviour they display on the other with LMX as a mediating variable within the model.

The primary assumption was that employees see HRM activities as the organisation's personalised commitment towards the employee and show reciprocal behaviour as a response in the form of a positive attitude and associated behavioural characteristics (Hannah and Iverson, 2004).

The study placed emphasis on employees' perceptions and specifically not on the intention of HRM practices as meant or implemented by HRM/frontline managers. The first reason behind this was that it is these perceptions that have predictive value as to the eventual role behaviour, rather than the actual HRM practices themselves (Wang and Khilji, 2006). Secondly, employees' individual perceptions of HRM practices (and their impact on conduct) have as yet received little attention (Alfes et al., 2013). This study's contribution is, in the first instance, to provide more insight into the relationship between Perceived HRM Practices and role behaviour. It also paid explicit attention to the question as to what degree the employee-frontline manager relationship may help to clarify the emergence of role behaviour.

6.1 Research question

What is the relationship between employees' perceptions of HRM practices on the one hand and their OCB behaviour on the other, and does the construct of LMX play a mediating role in this relationship?

The associated hypotheses were as follows:

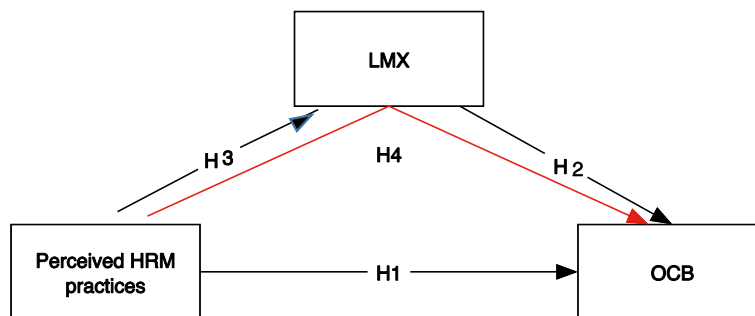
- H1 The employee's positive perception of the HRM practices has a positive effect on their OCB behaviour.

- H2 A high LMX quality as perceived by the employee has a positive effect on their OCB behaviour.
- H3 The employee's positive perception of the HRM practices has a positive effect on their perception of the LMX quality.
- H4 The connection between Perceived HRM Practices and OCB behaviour is positively mediated by the construct of LMX.

7 Methods

Figure 2 shows the visual representation of the research model that we designed (based on the research question and the hypotheses). This model takes into account the theoretical concepts as discussed above. It is the correlation between these concepts that led to the leading hypotheses.

Figure 2 Research model (see online version for colours)



The study's key methodology was empirical/quantitative in nature as it measured individual employees' perceptions. Although LMX and OCB are both two-sided constructs, only the employees' perceptions were measured.

7.1 Measures

The data required in order to answer the core question and assess the stated hypotheses were collated through the deployment of three validated instruments.

Considering the linguistic aspects arising from the diversity in ethnic background of the employees working in the organisation where the study took place, we chose to use both a Dutch and an English questionnaire to overcome any language problems we might encounter. The questionnaires were translated forward and back and made available to the participants in both languages.

The instrument to measure the *independent variable of OCB* comprised the 24-item scale developed by Mackenzie et al. (1991), translated by Stoffers and van der Heijden (2009). The four OCB dimensions as drafted by Organ (1988) – altruism, courtesy, sportsmanship and conscientiousness – were incorporated in this questionnaire. We followed up on the recommendation made by Gong et al. (2009) and measured OCB as a

latent construct. They suggested that researchers should not focus too much on the measurement of the separate dimensions. According to Gong et al. (2009), the outcomes of OCB as a latent construct and its measurement on the basis of the separate dimensions are the same.

The questionnaires comprised questions such as: 'I am always prepared to help (direct) colleagues' and 'I have taken on duties that are not required, but that do improve the image of the organisation'. The composition of the answer categories was based on a 5-point Likert scale, ranging from 'disagree' (1) to 'agree' (5).

Perceptions of HRM practices have previously been measured by way of a scale developed by Guest and Conway (2002). The list that was eventually used in this study (35 items) is Boon's (2008), who has argued that there is little consistency in the selection of HRM practices that eventually come to be part of the HRM system. Boon's design of the questionnaire was inspired by an investigation into the most frequently used HRM practices conducted by Boselie et al. (2005).

An example question is: 'the organisation offers me the opportunity to be responsible for my own duties myself' and 'the organisation offers me a salary that depends on my performance'. The composition of the answer categories was also based on a 5-point Likert scale, ranging from 'not at all' (1) to 'fully' (5).

As for the instruments used to measure OCB and HRM practice perception, it should be noted that the questions always focused directly on the individual employee's opinion. This was a conscious choice to look into the individual perceptions and was also in line with similar previous studies by Boon (2008).

In our investigation, LMX was measured through the 7-item scale developed by Scandura and Graen (1984), translated by Stoffers and van der Heijden (2009).

In essence, the LMX construct is two-sided. In order to stay in line with the measurement instruments used for OCB and perceived HRM practices, we chose to measure the LMX from the employee's point of view.

Example questions here were: 'I have enough faith in my frontline manager in order to be able to defend and justify their decisions in their absence and do it myself', and 'in your opinion, how well does your frontline manager understand your needs and problems?' The response categories were also based on a 5-point Likert scale, varying from 'not at all' (1) to 'completely' (5). The last question in the LMX questionnaire, 'How do you characterise your work relationship with your frontline manager in general?' had a different scale composition – from 'very ineffective' (1) to 'very effective' (5).

The questionnaires were complemented with some control variables. We chose to do so, as the organisation context could affect the results. If the effect of the contextual factors had not been taken into account, it would have been possible for the correlations between the variables to remain unclear or significant correlations could have been reported that were in fact caused by variables not taken into consideration (Knies, 2012).

Frequently used control variables at the individual level are: age, years of employment, sex and educational level (Boselie et al., 2005).

The control variables used in this study were *sex* (male, female), *age category* (22–29, 30–38, 39–44, 45–54), *nationality* (Dutch, German, Polish, other), *number of working years* (0–1, 1–5, 6–9, 10–15), *educational level* (lower and intermediate vocational education, professional higher education, academic higher education, other).

7.2 Organisational context

The study took place within a logistics and supply chain management organisation and focused on the participation of a specific type of staff.

The research target group was typified as follows: workers employed by the organisation at the time of this study who have at least completed intermediate vocational education.

7.3 Reliability

The research target group for this study was limited: 72 employees were asked for their participation. 50 employees completed the questionnaire, so the response ratio was 69%. This was more than adequate to fulfil the common requirement of a 30% sample size (Baarda, 2012). The study was in essence sufficiently reliable.

7.4 Validity

Campbell introduced the notions of internal and external validity in 1957. In terms of internal validity, it is important to ascertain whether the presupposed causal relationship has been validly measured. This study sought to establish a causal relationship, i.e., to look into the existence of a (significant) correlation between the independent variables perceived HRM practices and the dependent variable, OCB.

When it comes to the internal validity, it may be concluded that validated instruments were used and that the analysis technology (SPSS) enabled a correct analysis of the data. However, it may not be overlooked that the study was cross-sectional and measurement took place at a single moment in time. This type of measurement complicates the determination of causality. The study's internal validity was also hampered by the so-called common method variance (Lindell and Whitney, 2001). Given the study's nature, however, it proved impossible to evaluate at multiple moments in time or deploy another type of instrument alongside the questionnaires which could have safeguarded internal validity better.

External validity concerns the question as to what degree a researcher can and may generalise the outcomes of a study. A distinction should be made between generalisation *according to* target groups and generalisation *about* target groups.

With regards to the generalisation *according to* target groups, it could be said that the eventual outcomes would render a proper reflection of the entire research population. A response rate of 69% implies that the outcomes can be generalised *according to* target groups. Generalisations *about* target groups are trickier, given the limited sample size of 50. Scientifically, therefore, the study has limited added value.

8 Results

Below are the various results that followed from the SPSS analyses. These analyses will each be discussed in order to paint a clearer picture of the main results.

The goal is to eventually accept or reject the aforementioned hypotheses on which the conceptual model was based.

8.1 The MCAR test

Due to the low N within this study ($N = 50$), it is important to look into missing values and their complementation. The missing completely at random (MCAR) test was developed by Little (1988) and helps determine as to whether the missing values within the data set emerged completely at random. If so, and the test renders a significant value, it may be assumed that the missing values were produced at random.

In total, the data set comprised 28 missing values with the highest number of missing values within one item was 3 (6%) (HRM16).

The MCAR test rendered a (significant) value of 1,000, which means that the values are missing from the data set completely at random.

By means of the expectation maximisation method, said missing values were imputed. It must be noted that, in the first instance, they were complemented per construct (perceived HRM practices/OCB/LMX/control variables) in order to thus increase the accuracy of the missing values that were to be predicted and imputed. The various completed constructs were subsequently combined into a new source file, with no missing values whatsoever.

8.2 Cronbach's alpha

In order to determine the internal consistency within the constructs, Cronbach's alpha calculation was used. As a rule, a Cronbach's alpha of over .70 is considered good (Nunnally, 1978).

The Cronbach's alphas for perceived HRM practices and LMX were, without any doubt, good. With alphas of .926 for HRM and .930 for LMX, the scales could be considered to have good internal reliability and, therefore, useable.

The Cronbach's alpha for OCB was less positive at first and needed further consideration.

The following items did not contribute adequately to the questionnaires and were, therefore, deleted.

Table 1 Cronbach's alpha after the item was deleted

<i>Item</i>	<i>Cronbach's alpha after deletion</i>
I have to be continually encouraged in order to do my job	.665
I have the tendency to make a mountain out of a molehill	.680
I regularly waste working time complaining about unimportant issues	.657
I always focus on things that go wrong rather than the positive	.686
I never agree with my organisation's actions	.655

This intervention resulted in the Cronbach's alpha for the OCB construct rising to .841 (19 items), more than adequate to meet the convention of .7.

8.3 Descriptive data

Table 2 shows the descriptive data. It provides an overview of the control variables that were included in this study.

Table 2 Overview of control variables

<i>Control variables</i>	<i>Frequency</i>	<i>Percentages</i>
Sex		
Male	39	77.1%
Female	11	22.9%
Age		
22–29	16	32%
30–38	24	48%
39–44	8	16%
45–54	2	4%
Nationality		
Dutch	39	78%
Polish	2	4%
German	2	4%
Other	7	12%
Years of employment		
0–1	4	8%
2–5	18	34%
6–9	18	34%
10–15	10	20%
Education		
Intermediate vocational education	6	12%
Higher professional education	19	38%
Higher academic education	20	40%
Other	4	6%

The perceived HRM practices (35 items), OCB (19 items) and LMX (7 items) constructs were produced within SPSS by taking the average rating across respondents for that item within the relevant construct. These newly labelled constructs (HRMtotal, OCBtotal and LMXtotal) were also used in the correlation and regression analyses. It was assumed that the distance between the responses categories within the Likert 5-point scale would be equal, i.e., that they were ordinal scales. Although this statistical technique is not entirely correct and in extreme cases can lead to the wrong conclusions with regards to the statistical significance of components within the study, this method has been widely accepted over the past decade (Blaikie, 2003).

8.4 Outliers

Outliers are observed data that seem to be inconsistent in comparison with the entirety of the collected data and deviate more than usual from the average of all the data points (Hoaglin and Iglewicz, 1987). Outliers can cause problems in further analyses and it is important, therefore, to determine whether there are any present.

The outlier labelling method (Hoaglin and Iglewicz, 1987) showed that there were no outliers within the dataset.

8.5 Correlations

The correlation matrix (Table 3) creates a clear picture of the correlations between the main constructs.

Table 3 Correlation matrix

		<i>OCBtot</i>	<i>HRMtot</i>	<i>LMXtot</i>	<i>Sex</i>	<i>Age</i>	<i>Nat.</i>	<i>Years</i>	<i>Ed.</i>
OCBtot	Pearson correlation	1							
	Sig. (2-tailed)								
	N	50							
	Average	4.15							
	Std	.437							
HRMtot	Pearson correlation	.428**	1						
	Sig. (2-tailed)	.002							
	N	50	50						
	Average	3.29							
	Std	.499							
LMXtot	Pearson correlation	.549**	.714**	1					
	Sig. (2-tailed)	.000	.000						
	N	50	50	50					
	Average	3.53							
	Std	.835							
Sex	Pearson correlation	.056	-.057	.005	1				
	Sig. (2-tailed)	.707	.698	.973					
	N	50	50	50	50				
Age	Pearson correlation	.047	.076	.070	-.143	1			
	Sig. (2-tailed)	.744	.602	.627	.332				
	N	50	50	50	50	50			
Nat.	Pearson correlation	.035	.089	-.034	.497**	-.075	1		
	Sig. (2-tailed)	.809	.541	.819	.000	.610			
	N	50	50	50	50	50	50		

Note: **Correlation is significant at the 0.01 level.

Table 3 Correlation matrix (continued)

		<i>OCBtot</i>	<i>HRMtot</i>	<i>LMXtot</i>	<i>Sex</i>	<i>Age</i>	<i>Nat.</i>	<i>Years</i>	<i>Ed.</i>
Years	Pearson correlation	.126	.080	-.005	-.031	.613**	-.030	1	
	Sig. (2-tailed)	.394	.587	.972	.833	.000	.841		
	N	50	50	50	50	50	50	50	
Ed.	Pearson correlation	.122	.127	.086	.108	-.225	.280	-.282	1
	Sig. (2-tailed)	.402	.385	.558	.463	.120	.054	.052	
	N	50	50	50	50	50	50	50	50
Dept.	Pearson correlation	-.040	-.009	.016	-.039	-.008	-.393**	-.038	-.088
	Sig. (2-tailed)	.783	.950	.913	.791	.955	.005	.799	.547
	N	50	50	50	50	50	50	50	50

Note: **Correlation is significant at the 0.01 level.

Noticeable in this data is that the three constructs were primarily positive (on a Likert scale with a maximum score of 5), with OCB as most positive by far (an average of 4.15 with a standard deviation of .437).

This reveals a tendency for the employees to assign themselves a relatively high OCB value. Their perception of the HRM practices was also above average. The 3.53 value for LMX is also higher than expected, therefore that it can be said that most employees consider their relationship with their frontline manager to be beneficial, but with a great variance between the respondents. Analysis based on the correlations and regression is required in order to be able to draw any further conclusions.

Based on the Pearson correlation, each of the main constructs correlated positively with the others.

Perceived HRM practices has a statistically significant correlation with OCB ($r = .428$, $p = .002$); LMX was positively correlated with OCB ($r = .549$, $p = .0001$) and perceived HRM practices correlated positively with LMX ($r = .714$, $p = .0001$). It should be noted that there is no multicollinearity in any of these correlations.

Each of the relationships above is a positive correlation and it may also be concluded that they are sufficiently strong – a correlation of .3 and over is generally regarded as being sufficiently strong. This criterion is met by each. Although at first glance this statistical significance appears to be a good omen for the acceptance of the hypotheses, a regression analysis is necessary in order to make any decisive statements in this respect.

The control variables present another picture. None of the control variables had a significant correlation with anyone of the main constructs.

8.6 Regression

Tables 4 and 5 are the tables with the results of the hierarchical multiple regression. Table 4 shows the regression analysis for the purpose of assessing Hypotheses 1, 2 and 4.

A separate regression analysis was conducted in order to assess Hypothesis 3, i.e., that there is a relationship between perceived HRM practices (independent) and LMX (dependent). This is presented in Table 5.

Table 4 Results of hierarchical multiple regression with OCB as dependent variable

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	β	<i>Sig</i>	β	<i>Sig</i>	β	<i>Sig</i>
Variables						
Sex	.073	.686	.118	.482	.067	.669
Age category	-.031	.872	-.041	.816	-.097	.555
Nationality	-.050	.810	-.114	.555	-.068	.706
Years of employment	.203	.299	.154	.392	.227	.181
Education	.179	.286	.115	.456	.119	.408
Department	-.042	.807	-.069	.658	-.059	.685
Perceived HRM practices			.417	.005	.044	.814
LMX					.517	.007
R^2	.052		.217		.347	
ΔR^2	-.080		.087		.219	
R^2 change	.052		.165		.129	
F	.394		1.664		2.718	
ΔF	.394	.879	8.856	.005	8.120	.007

Clarifying notes: It can be deduced from Table 4 that none of the control variables have a significant effect on OCB. Taken together, the control variables describe 5.2% of the explained variance (R^2) of OCB within the first step.

Perceived HRM practices were added to the model in Step 2. It is immediately noticeable that the explained variance increased by 16.5% to a total of 21.7%. The control variables all remain non-significant, apart from the perceived HRM practices variable.

Step 3 added LMX into the model in order to measure its mediating effect.

It should be added here, that a number of conditions had to be met before any such mediating effect could be measured (Baron and Kenny, 1986). These conditions can be tested through linear regression and entail that each of the following relationships should have a significant correlation: independent-dependent variable, independent-mediator variable and mediator-dependent variable. In this design, all of these conditions were fulfilled; the linear regression demonstrated these significant associations and, therefore, the mediating effect could be evaluated.

The explained variance increased from 12.9% to a total explained variance of 34.7%. LMX therefore has a significantly positive correlation with OCB. However, when we added LMX to the model the perceived HRM practices construct, previously added, was no longer significant. This confirmed the mediating role of the LMX construct. Mediation occurs if the correlation between independent and dependent variables is reduced when adding the assumed mediator to the model (Baron and Kenny, 1986). Although it cannot be said that it intervenes entirely (in order to fulfil this criterion, the relationship between the independent and dependent variables must completely disappear), the LMX construct does decidedly have a strong influential effect.

Table 5 Results of hierarchical multiple regression with LMX as dependent variable

Variables	Model 1		Model 2	
	β	Sig	β	Sig
Sex	.022	.905	.099	.452
Age category	.127	.519	.109	.435
Nationality	.021	.920	-.089	.556
Years of employment	-.056	.777	-.140	.323
Education	.103	.543	-.006	.958
Department	.028	.872	-.020	.869
Perceived HRM practices			.723	.000
R^2	.021		.516	
ΔR^2	-.116		.435	
R^2 change	.021		.495	
F	.150		42.935	
ΔF	.150	.988	6.388	.005

Clarifying notes: A clearly visible significant addition of perceived HRM practices in step 2 demonstrates a relationship between perceived HRM practices and LMX. Given the strong mutual correlation, we had to check for multicollinearity. The relevant analyses based on the variance inflation factor (VIF) value and the score based on Tolerance give no indication of multicollinearity.

Table 6 Testing for multicollinearity

Model 1	Beta in	t	Sig.	Collinearity statistic		
				Tolerance	VIF	Minimum tolerance
HRM	.723 ^b	6,552	.000	.947	1,056	.509

Note: Dependent variable = LMX.

8.7 Interpretation of hypotheses

The interpretation of the hypotheses rendered the outcomes below.

- H1 The employee's positive perception of the HRM practices has a positive effect on their OCB behaviour.

The hypothesis is accepted. The regression analysis revealed a significant correlation ($\beta = .417$, $p < .05$).

- H2 A high LMX quality as perceived by the employee has a positive effect on their OCB behaviour.

This hypothesis is accepted. The regression analysis revealed a significant correlation ($\beta = .517$, $p < .05$).

- H3 The employee's positive perception of the HRM practices has a positive effect on their perception of the LMX quality.

The hypothesis is confirmed. The regression analysis revealed a significant correlation ($\beta = .723$, $p < .05$).

- H4 The association between perceived HRM practices and OCB behaviour is positively mediated by the construct of LMX.

The hypothesis is confirmed. The hierarchical multiple regression (Table 3) shows a significantly mediating effect in Step 3.

9 Conclusions, discussion and recommendations

Central to this study was the relationship between perceived HRM practices and OCB. Given the outcomes of previous studies, we expected to find a positive relationship between these constructs. We also considered the mediating role of LMX in our study.

The starting point for this study was existing research. Purcell and Kinnie (2006), among others, demonstrated that employees' OCB behaviour correlates with their perception of their organisation's HRM practices.

The central research question for this study was:

- What is the relationship between employees' perceptions of the HRM practices on the one hand and their OCB behaviour on the other, and does the construct of LMX play a mediating role in this relationship?

Considering the results of the study on the basis of single and multiple regression analyses it can be concluded that all of the important correlations were found to be statistically significant.

Concretely, this means that perceptions, with regards to HRM practices, have a significant effect on an employee's OCB behaviour. This relationship is positive in nature; an employee whose judgement of the organisation's HRM practices is beneficial will subsequently also display higher rates of OCB behaviour. The mediating role of the LMX construct is confirmed in the multiple regression: as soon as LMX is added to the relationship, the explained variance increases. In other words, the relationship existing between perceived HRM practices and an employee's OCB behaviour can be partly explained by their relationship with their frontline manager. This outcome is, for the main part, in line with previous results pertaining to this topic (Boselie and Paauwe, 2004). This confirmation is important from a scientific point of view, as it contributes to the ongoing discussion about this subject.

Although the sample size of $N = 50$ was modest and the potential research population was 72, given the response rate of 69% the study was a success. Due to the, scientifically speaking, modest sample size, the results do not directly have any convincing (added) value, but from a practical point of view they are valuable outcomes that can serve as a basis for the further crystallisation of (HRM) policy.

The expected positive relationship between an employee's perception of the HRM practices provided and their subsequent OCB behaviour is confirmed. This fits in with the prevailing view of both Boselie and Paauwe (2004) and Wright and Nishii (2007) who, as discussed, posit that employees' opinions of the HRM practices implemented by their organisation have a positive effect on these employees' (role) behaviour (Purcell and Kinnie, 2006).

The mediating role of the LMX construct was confirmed by multiple regression. LMX provides the model with additional predictive value.

The importance of a good relationship between employee and frontline manager may, hopefully, no longer be underestimated when it comes to employees' perceptions of HRM practices and (the stimulation of) their role conduct. Purcell and Hutchinson (2007) found the same. They proposed that it is, in particular, the frontline manager's role and behaviour that has a great impact on the employees' perception of HRM practices and behaviour, and suggest further research into the critical role of the frontline manager.

Another item for discussion concerns the measurement of the OCB construct. In this study, OCB was measured as a 'latent construct'. Specifically, this means we measured the OCB construct according to its different dimensions. LePine et al. (2002) concluded, based on a meta-analysis, that the mutual relationship between the dimensions as proposed by Organ (1988) for the measurement of OCB (altruism, courtesy, sportsmanship and conscientiousness) was so great, that distinctions between the different dimensions could not be made and that therefore OCB may be evaluated as a latent construct. On the basis of this conclusion, Lepine et al. proposed to conduct more research into OCB as a latent construct.

In their research into the effect of high performance work systems (HPWS) on OCB, Gong et al. (2009) found that the OCB design based on Organ's (1988) 5-factor model and the model of OCB as a latent construct showed a similar fit.

Although this is all a convenient rationale for the measurement of OCB as a latent construct, it is not universally accepted as yet and so remains an item for discussion to date.

With this study, we tried to sketch as good a picture as possible of the relationship between Perceived HRM practices and OCB behaviour. However, the study did have its limitations. A limited sample size of 50 respondents, firstly, limits statistical analyses and impacts on any scientific interpretation. According to Knofczynski and Mundfrom (2008), a sample size of at least 110 in a model with 1 or 2 independent variables is required in order to regard its results as sufficiently reliable.

Moreover, another restriction was the fact that the study was administered at a single organisation. This hampers the generalisability of the results, due to certain context-related factors possibly affecting the results.

Furthermore, the study was cross-sectional; the measurement took place at one single moment in time. This type of measurement complicates the determination of causality. Another limitation of the study, which usually follows from a cross-sectional nature, is the so-called common method variance (Lindell and Whitney, 2001). As soon as two or more variables are measured by way of a similar type of instrument (which happened in this study for all of the main constructs), chances are that their correlation is determined by a certain bias of the respondent. Podsakoff et al. (2003) describe the example of providing socially correct answers in the questionnaire or a negative affection towards the topic.

9.1 Follow-up research

This study focused on, and evaluated, the employee's point of view. The constructs can, however, be measured two ways. Follow-up research might focus on an approach whereby the views of both the employee and their manager can both be determined.

Furthermore, the measurements in this study were made at the individual level. Although multiple departments were involved, we did not include a 'team measurement' to acquire more knowledge in this respect, even though Gong et al. (2009) do posit that OCB also manifests itself at the team level. The inclusion of measurements at the team level might provide the model more depth.

9.2 Practical implications

The organisation where our study took place will now be in the possession of a document that provides insight into various HRM-related issues. The outcomes map out the perceptions with regards to its HRM practices, whereby it can assess to what degree the underlying intention of the HRM practices truly matches the actual perceptions of its employees in this respect. Especially when it comes to SHRM issues, such as the personal development of employees through training and courses – it is important to examine as to whether the investments attached are also truly interpreted and accepted as such. It might even be revealed that additional investments (as in time and money) are required.

This study proved the influence of the relationship between the frontline manager and employees to be unquestionable and crucial. Purcell and Hutchinson previously argued in 2007 that the HRM-performance issue demanded more research, especially of the frontline manager's role, since they fulfil a key duty in this affair. If frontline managers can make their employees believe that the work they carry out is meaningful and contributes to the achievement of the organisational goals, the employees will sooner display the behaviour that actually contributes to the realisation of these goals (Organ, 1997).

Organisations are increasingly expecting employees to show behaviour that exceeds their job description, in order to respond well to both (organisational) challenges like flattening and down-sizing and the increasing dynamics and competition in the market (Parker et al., 2010). When it comes to OCB behaviour, this study merely took a snapshot; continuous monitoring of the employees' (desired) behaviour is advisable if the employee is to be an important and crucial coupling within the HRM-performance issue.

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