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From Kelley's attribution theory to Bowen and Ostroff's HRM system:

The moderating effects of consensus

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Preface

This master thesis within the field of Organizational Psychology gave me a better understanding of how research is conducted. I would like to thank Prof. dr. Karin Sanders and Dr. Huadong Yang for their support and advice.

Without the kind cooperation of the companies and their employees who participated in this research, this master thesis could not be written. Therefore, I thank the companies, including all the employees who participated in this research.

Special thanks are for my family: their support in difficult times gave me the strength that was necessary to complete this master thesis.

Abstract

The aim of this study was to examine the effects of consensus in the relation between Commitment-based management and knowledge sharing. Consensus was conceptualized in two different ways: according to Kelley's theory (1973) as consensus among employees and according to Bowen and Ostroff (2004) as consensus among HR principals. The research question was: Can the theory of Bowen and Ostroff (2004) as well as Kelley's covariation model (1973) explain how consensus affect the relationship between Commitment-based Management and knowledge sharing? Consequently, how can this relationship be explained? And how does collectivistic orientation affects this relationship? Results among 356 employees working at four different organization showed that consensus among HR principals strengthened the relation between Commitment-based management and knowledge sharing. Also consensus among employees strengthened the relation between Commitment-based Management and knowledge sharing. Collectivistic orientation related to knowledge sharing, but did not affect the above described relationships. Implications are that agreement among employees and consensus among HR principals should be advocated, because without consensus Commitment-based Management has little effect.

Samenvatting

Dit onderzoek werd uitgevoerd om de effecten van consensus te bestuderen op de relatie tussen Commitment-based Management en kennis delen. Consensus werd geconceptualiseerd op twee verschillende manieren: Naar aanleiding van Kelley's (1973) theorie als consensus tussen medewerkers en naar aanleiding van de theorie van Bowen en Ostroff (2004) als consensus tussen HR leidinggevenden. De onderzoeksvraag was: kunnen zowel de theorie van Bowen en Ostroff als de theorie van Kelley (1973) uitleggen welk effect consensus heeft op de relatie tussen Commitment-based management en kennis delen? Werknemers bij vier verschillende bedrijven (356 werknemers in totaal) vulden de vragenlijst in. Hieruit bleek dat de relatie tussen Commitment-based management en kennis delen werd versterkt door consensus tussen HR leidinggevenden. Ook consensus tussen werknemers versterkte de relatie tussen Commitment-based Management en kennis delen. Collectivistische oriëntatie relateerde aan consensus, maar had geen effect op de relatie tussen Commitment-based management en kennis delen. De implicaties zijn dat consensus onder zowel werknemers als leidinggevenden belangrijk zijn, want zonder consensus heeft Commitment-based management weinig effect op kennis delen.

Introduction

Organizational learning is the process of improving actions through better knowledge and understanding (Fiol & Lyles, 1985). Developing knowledge in organisations is one of the most important strategic means for competitive advantage in firms (Grant, 1996) and can only occur when individuals throughout the organization obtain knowledge (Nonaka, 1994). One way of organizational learning is conceptualized as knowledge sharing. Knowledge sharing is an employee behavior that covers asking for advice and giving each other advice, as well as openness for sharing opinions and suggestions. (Van Woerkom & Sanders, 2010). To enhance the effectiveness of an organization, it is possible to increase knowledge sharing through the content of HRM, for example Commitment-based Management, which is a set of combined HRM practices that improve employees' work attitudes and behavior (Ang, 2003; Li, Frenkel & Sanders, 2011; Lee & Kim, 2010). For example, Edmondson (1999) found that knowledge sharing can be reinforced through HRM practices that focus on reinforcing a safety climate wherein employees are not afraid to take interpersonal risks.

In spite of these positive effects of specific HRM practices on employee outcomes such as knowledge sharing (Jaw & Liu, 2003), little is known about the connections that are responsible for this relation. There is a 'black box' (Bowen and Ostroff , 2004; Sanders & Looise, 2006), regarding the question: how do these HRM practices contribute to organizational outcomes? The problem here is that the content of HRM, such as Commitment-based Management, is often perceived differently by employees, whereby '*each employee makes his own construction of reality*' (Delmotte, 2008, p. 107). This means that the content of Commitment-based Management alone cannot explain its contribution to organizational outcomes. Therefore, this research will focus not only at the content of HRM,

but also at the process through which HRM provides a common interpretation among individuals about what behavior is expected and rewarded (Bowen & Ostroff, 2004). To create this common interpretation of HRM among employees, messages send by HRM need to have three features: messages should be *distinctive* and *consistent*, with *consensus among HR decision makers* (Bowen & Ostroff, 2004). First, a message is distinctive when its clearly visible among other messages, second a message is consistent when messages are the same over time and situations and last, consensus or agreement among HR decision makers is of crucial importance to get a clear message across to employees.

All three features of HRM – consensus, consistency and distinctiveness, are important to achieve a strong HRM system. Consensus is regarded in this paper as the most important feature of perceiving HRM, because consensus among message senders is required to create distinctive and consistent messages (Bowen & Ostroff, 2004; Delmotte, 2008).

Bowen and Ostroff (2004) based their theory upon Kelley's Covariation model (1973), which explains the process of causal attribution. People try for millennia to make sense of their world by causal attribution to answer questions regarding why things happen. Causal attribution, first drawn up by Heider (1958:16) is concerned with the processes that determine how people explain events and behavior. However, there are differences in interpretation between the theory propose by Bowen and Ostroff (2004) and Kelley (1967, 1973). Kelley (1967: 197) stated that consensus occurs when '*attributes of external origin are experienced the same way by all observers*'. Therefore consensus concerns **all** persons who perceive consensus. Bowen and Ostroff (2004: 2112) stated that '*agreement among principal HRM decision makers (...) helps promote consensus among employees*'.

The research question hereby is: Can the addition of Bowen & Ostroff (2004) about consensus among HR principals, explain more about how consensus affects the relationship between HRM and knowledge sharing than Kelley's (1973) theory about consensus among

individuals? Consequently, how can these relationships be explained?

Heider (1958: 58) stated that the perception of the world is of an important influence in perceiving consensus. Strongly linked to this is culture, defined by Hofstede (2005: 25) as “*the collective programming of the mind which distinguishes members of one human group from another*”. One important dimension of cultural orientation is collectivism. In a collectivistic orientation, collective interest have right of way over individual interests, whereby harmony or agreement and saving one’s face are some of the most important virtues (Hofstede, 2005). Collectivistic orientation is suggested to have an important effect on consensus (Li, Frenkel & Sanders, 2011). Because of these findings, the research question is elaborated with how collectivistic orientation the relationship between HRM and knowledge sharing.

Theoretical Framework

Covariation of consensus

Kelley’s attribution theory “*deals with questions concerning the causes of observed behavior, and the answers of interest are those given by the man in the street*” (Kelley, 1973, p 107).

According to Kelley’s covariation theory, a causal attribution is a presumed relation between cause and effect, whereby people attribute behavior to three types of causes that are person, object and context. To answer the question why people attribute behavior to these causes, Kelley (1973, p120) theorized that people need specific information to reach a valid judgement about a cause and its effect, therefore he introduces three conditions: a response is valid when there is consistency, distinctiveness and consensus.

According to the covariation principle, effects are attributed to the cause with which, over time it covaries (Kelley 1973; Kelley & Michela, 1980). Consensus covaries with person, this means that consensus information is needed to determine whether a observed effect can be attributed to persons or entities (Kelley 1973; McArthur, 1972; Kelley & Michela, 1980). A high level of consensus results in an object attribution, whereas a low level of consensus results in a person attribution. For example, if consensus among employees is high, this means that most employees - although very varied in their opinions - think the same about a certain subject. If almost everyone perceives HRM policy as beneficial for knowledge sharing, they are likely to describe the behavior –knowledge sharing- to HRM policy. However, if hardly anyone perceives HRM policy as beneficial for knowledge sharing, than knowledge sharing is attributed to the individual characteristics of employees. In general, consensus information is important for employees to make sense of the rules and regulations of their organization.

Kelley's covariation principle, specifically consensus, can thus explain the positive relationship between Commitment-based Management and organizational outcome measurements, such as worker attitudes (Gould-Williams, 2004) If most employees view Commitment-based Management as having positive effects on employee's behavior, it is likely that the behavior will be executed more. This is in line with the social exchange theory of Blau (1967), that suggests that employees tend to feel committed to reciprocate positive perceived behavior with behavior that benefits the organization (Cabrera & Cabrera, 2005; Zhang, Wan & Jia, 2008). Consensus among employees can strengthen this relationship, because it causes a strong group identification, resulting in employees contributing to their group or organization by making the effort of knowledge sharing (Cabrera & Cabrera, 2005). Also, an organization with more cohesiveness and less conflict has positive effects on knowledge sharing (Van Woerkom & Sanders, 2010). As consensus among employees

resembles an organization with more cohesiveness and less conflict, it is easier for employees to reciprocate the effects of Commitment-based Management with knowledge sharing.

Therefore, the following hypothesis is proposed:

- 1 The relation between Commitment-based Management and knowledge sharing is strengthened by consensus among employees.

Attribution of HRM by Bowen and Ostroff (2004)

Attributional theories have been used in a great number of areas in psychological research, such as personality psychology, sport psychology and social psychology. It has taken a few decades before this theory was introduced in HRM Psychology. Bowen and Ostroff (2004) were the first to base an organizational theory on Kelley's covariation model. The theory of Bowen and Ostroff (2004) is a welcomed addition to the research field of organizational psychology, because they shift the focus from the content of HRM – that is, what HRM practices an organization preaches – to the process of HRM. This process concerns how the message of Commitment-based Management is getting across with the employees. The goal is to create an HRM system that will lead to a strong situation in which employees will be motivated to exhibit the right behavior, resulting in achieving organizational goals. In this strong situation individuals share a perception of that which is important, and what behavior is expected and rewarded: *“The more HRM practices send strong signals about what strategic goals are most important and what employee behaviors are expected, supported and rewarded relative to those goals, the more likely it is those goals will be achieved”* (Bowen & Ostroff, 2004, p. 207)

So, how do messages of HRM create a strong situation? To answer this question,

Bowen and Ostroff (2004) based their theory on Kelley's Covariation theory (Kelley 1973; Kelley & Michela, 1980). In doing so, Bowen and Ostroff (2004) focus solely on entity attribution – that is how employees perceive HRM and how does the process work through which HRM provides a common interpretation among individuals about what behavior is expected and rewarded (Bowen & Ostroff, 2004). The concept consensus in the theory of Bowen and Ostroff (2004) is different from Kelley's theory (1973). In Kelley (1973), consensus stands for agreement among other persons, whereas in Bowen and Ostroff (2004), consensus entails consensus among HR principals. Bowen and Ostroff (2004) argue that agreement among HR principals is important because the messages they send to employees can foster consensus among employees. Without agreement among HR principals, unofficial implicit messages can be different from the official explicit messages, creating uncertainty among employees about the desired behavior they should display.

Not all researchers have found positive effects of consensus among HR principals. Sanders, Dorenbosch and De Reuver (2008) found that consensus among HR principals did not have an effect on affective commitment. Therefore, (Sanders et al. 2008, p. 420) suggest that *“it is maybe more reliable and valid to assess the perception of the employees concerning (...) consensus between line and HR managers”*. Accordingly, Li, Frenkel and Sanders (2011) examined the relation between HR system strength and employee attitudes among 810 Chinese employees. Their research showed that high-performance work systems (HWPS) are positively related to work satisfaction. They found that perceived consensus among HR principals interacted with HWPS climate strength (the variance between units), resulting in a higher amount of work satisfaction. Both climate strength and consensus among principals are part of the process of HRM, and do not show the relation between the content of HRM – that is Commitment-based Management - and the process of HRM. Employees tend to reciprocate their company's investment in Commitment-based Management (Cabrera

& Cabrera, 2005; Zhang, Wan & Jia, 2008). In perceiving consensus among HR principals, employees know what behavior they should display in return.

Because of this, the following hypothesis is proposed:

- 2 The relation between Commitment-based Management and knowledge sharing is strengthened by perceived consensus among HR policymakers.

Collectivistic orientation

Consensus is an important feature of collectivistic cultures (Hofstede, 1980). For example, Japan is a collectivistic culture that is consensus orientated where differences among employees are mediated instead of accentuated (Porter, 2002). Li, Frenkel and Sanders (2011) found that consensus interacted with HWPS climate strength on employee outcome measurements such as work satisfaction. This interaction was only present with employees in China. Research by Sanders et al. (2008) found no effects of consensus among HR principals in the Netherlands. Li et al. (2011) suggest that this is due to cultural differences between both countries.

It may be strange to examine collectivism in the Netherlands, yet in all cultures individual people differ in the amount of collectivism they prefer (Hofstede, 1980). For example, people differ in the amount of collectivistic orientation, that is a tendency to cooperate with group goals (Wagner, 1995). Also, in the east of the Netherlands there are subcultures that are more collectivistic orientated than people who live in urbanized areas. In some parts of the Netherlands, there is strong emphasis on helping your neighbours. In those areas, there is more social cohesion whereby people feel more connected with their neighbourhood (Deuning, 2009). It could be that collectivistic orientation fosters not only

consensus among employees, but also consensus among HR policymakers. For all that, it is interesting to explore the relation between CBM, collectivistic orientation and knowledge sharing.

Method

Sample

Companies were approached via informal connections or e-mail and telephone-contact with the HR manager. Three companies decided to attend: 184 respondents (response rate of 5,6 %) were from a hospital; 142 respondents (response rate of 15,8 %) were from a caring centre for people with intellectual disabilities; 15 respondents (response rate of 42,9 %) were from a company that publishes online gaming portals. In addition, 15 respondents from a municipality were asked to fill out the questionnaire (response rate of 86,67 %). Together, a total of 355 employees responded, from which 24,5% was men. Mean age of the respondents was 41.3 years (SD =11,3). 17 (4,9%) employees completed secondary school, 137 (39,7%) employees had intermediate vocational education, 155 (44,9%) employees completed higher vocational education and 36 (10,4%) employees had a master degree. A fulltime contract was held by 45,5 % of the respondents. Within this sample, 16,5 % of the respondents were supervisors.

Procedure

Questionnaires were digitally administered to employees within these companies. Only employees without an e-mail address of the organization received a paper version. Because some Chinese employees spoke better English than Dutch, the questionnaires were

administered in two languages. Employees were informed about the questionnaire by mail (internet version) or letter (paper version) which stressed the importance of this study. A few days later the questionnaire was administered with a short explanation that underlined the confidentiality of the research, and that the research focused on the first impression, so that there were no wrong or right answers. After two weeks, a reminder with a deadline was sent to all employees. The questionnaire consisted of a list of questions that measured perceived consensus among HR principals and a scenario that measured consensus among employees. Two scenario manipulations were created to resemble a high consensus situation and a low consensus situation. From the 355 employees that filled out the questionnaires, 111 employees (31,1%) filled in the version with high consensus.

Measurements

A 4-point Likert scale, was used to measure all the items in this study. The scale runs from '1 = totally disagree' through '4 = totally agree'.

Commitment-based Management was measured by an questionnaire also used by Sanders et al. (2008), Macky and Boxall (2008) and Frenkel and Li (2008) and consists of nine items. Examples of these items are: *“Together with me, a clear career planning is made”* and *“This company pays much attention to training and education”*. This scale was found reliable (Chronbach's $\alpha = .70$). Also a scale developed by Zhang, Wan and Jia (2008) was used. The scale consisted of seven items. Examples are: *“My company treats each employee fairly”* and *“My company encourages employees to participate in decision making”*. The reliability of this scale was low (Cronbach's $\alpha = .66$). Factor analysis showed that the item: *“My company respect employee's self-dignity”*, did not show as a component of the questionnaire. The removal of this item resulted in a sufficient reliability (Cronbach's $\alpha =$

.78).

A field study was used to measure *employees perceptions about consensus among HR policymakers* by using parts of a scale about HRM system strength developed by Delmotte (2008). To shorten the questionnaire, items that were similar to each other were removed. This resulted in a total of five items. To match the English version of the questionnaire with the version in Dutch, one item was added. An example is: “*Line management and personnel management are clearly on the same wavelength*”. The reliability of this scale was low (Cronbach’s $\alpha = .54$). Factor-analysis revealed that one item loaded on a different factor, that is: “*Management in this organization supports personnel policy unanimously*”. Therefore this question was removed. By doing so, the reliability of this turned out to be sufficient (Cronbach’s $\alpha = .77$).

A *scenario about a situation in a company* was used to measure consensus among employees. The scenario was designed to reflect a company that is implementing Commitment-based Management and was considered readily understandable and easily to imagine oneself in. See Appendix A, for the scenario. Manipulations were created according to a high versus a low consensus situation. An example is: “*Since the time you have worked in this company you have noticed that the HR department usually takes measures that are experienced by you, as well as your colleagues in the same way*”. For the different scenario manipulations, see Appendix B, Table 6. To measure if these manipulations were understood by the respondents, a scale was created with six items. An example is: “*The HRM policy is stable*”. Reliability was found sufficient (Cronbach’s $\alpha = .85$).

To measure *knowledge sharing* of employees, questionnaires developed by Costa (2002) and Van Woerkom and Sanders (2008) were used. Six of the items were used. An example of the items is: “*I regularly ask my colleagues for advice*” and “*My colleagues do not always open up*”. Negative stated items were recoded, so that a high tendency of knowledge

sharing resulted in a high score. The scale was used twice in the questionnaire: first as a dependent variable to measure the effects of perceived consensus among HR principals and secondly the scale was used as a dependent variable to measure the effects of consensus among employees. The reliability of this scale was low. Factor analysis revealed that one question, that is: *'I regularly ask my supervisor for advice'* loaded on a different factor. After removal of this question, the reliability turned out to be sufficient. (Cronbach's α varied from .72 up to .79).

Collectivistic orientation (Wagner, 1995) was measured by three items. A high score on this scale showed a high degree of collectivistic orientation. An example was: *"I prefer to work with others in a group, rather than working alone"*. The reliability of this scale was low (Cronbach's $\alpha = .45$). Factoranalysis showed that one item, *"I believe that working with a group is better than working alone"* did not load on this scale. After removal of this item, alpha turned out to be sufficient (Cronbach's $\alpha = .79$).

Analyses

Control variables in this study were organization, tenure, years employed in current job, type of contract, and whether the respondent held an executive function. The data in this sample was normally distributed. Missing data were examined. If a respondent had less than 20 % of items missing, the sum score was calculated the by mean of the entered data. In this research, an confidence level of alpha .05 was utilized. An independent sample T-test was conducted as a manipulation check: respondents perceived the scenario manipulations differently ($t(357) = 9.93, p \leq .01$). Multiple regression analysis were conducted to test the hypotheses. First the control variables were entered in model one, second the standardized moderator and independent variables were entered in model two. In the third step, the product variable of the moderator and independent variable was entered in model three. When a moderator effect

was present, the interaction effect was interpreted by plotting the regression lines for values of the moderator variable (Aiken & West, 1991). P-values of .05 were considered significant (Aiken & West, 1991).

Results

Descriptive statistics and correlations

The means, standard deviations and correlations for the variables included in this study are presented in Table 1. Perceived consensus among HR principals is strongly related to Commitment-based Management ($r = .45, p \leq .01$). Knowledge sharing is related to Commitment-based Management ($r = .25, p \leq .01$) as well to consensus ($r = .21, p \leq .01$). In the second part of the questionnaire, picturing a scenario, there was a relation between knowledge sharing and Commitment-based Management ($r = .17, p \leq .01$). Also a relation was found between consensus and knowledge sharing ($r = .26, p \leq .01$).

The control variables showed that age and organization relate significantly to the first measurement of knowledge sharing. Age is negatively related to knowledge sharing. This indicates that younger employees are more likely to engage in knowledge sharing than older employees. Gender, age, organization and type of contract and if the respondent was an executive relate significantly to the second measurement of knowledge sharing. Females are slightly more likely to engage in knowledge sharing than males. Employees with a part-time contract are also more likely to engage in knowledge sharing than employees with a fulltime contract. In the Netherlands, especially woman work part-time. Therefore, it is no surprise that gender and type of contract showed a strong significant relationship. Executives

significantly share less knowledge in the second part of the questionnaire than non-executives.

Lastly, collectivistic orientation relates to both measurements of knowledge sharing.

Variables	Mean	SD.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender (1 = Female)	.75	.43														
2. Age	41.26	11.74	-.22**													
3. Education	3.60	.79	-.05	.03												
4. Organization	.40	.49	-.17**	-.22**	.17**											
5. Tenure (Organization in years)	11.93	10.31	-.09	.60**	-.08	-.14**										
6. Years employed in current job	7.89	8,6	-.03	.43**	-.04	-.09	.47**									
7. Contract (1 = fulltime)	.45	.50	.45**	-.02	.06	-.19**	.04	.06								
8. Executive (1= yes)	.16	.37	.21**	.13*	-.21**	-.13*	-.06	-.01	.24**							
9. Questionnaire commitment-based management	2.43	.40	.11	-.17**	-.10	.36**	-.02	-.09	-.03	-.09						
10. Perceived consensus among HR principals	2.55	.47	.11	-.21**	-.06	.34**	-.08	-.07	-.06	.11	.46**					
11. Questionnaire knowledge sharing	2.99	.37	.11*	-.15**	.02	.23**	-.06	.05	-.04	-.02	.24**	.22**				
12. Scenario Commitment-based Management	2.85	.48	.06	-.07	-.13*	.20**	.01	.05	-.07	-.01	.23**	.18**	.33**			
13. Consensus among employees (1 = high)	.31	.46	.09	.07	-.02	-.06	-.01	.09	-.03	.07	-.01	-.02	.01	.06		
14. Scenario knowledge sharing	2.81	.40	.16**	-.05	-.05	.13**	-.02	.13*	-.10	.03	.15**	.08	.42**	.17**	.26**	
15. Collectivistic orientation	2.98	.61	-.01	-.05	.07	-.01	-.06	-.03	-.03	-.06	.06	.08	.26**	.10	.01	.11*

Table 1: Means, standard deviations and correlations between variables

**= $p \leq .01$; *= $p \leq .05$.

Test of Hypothesized models

Age was left out for its strong relation with Years employed in current job ($r = .43, p \leq .01$). Gender was left out for its strong relation with type of contract ($r = .45, p \leq .01$). A main effect of consensus among employees was found ($\beta = .20, p \leq .01$). Control variables in the analyses were organization, type of contract and years employed in current job.

The first hypothesis predicted that the relation between Commitment-based Management and knowledge sharing is strengthened by consensus among employees. Results confirmed hypothesis 1 ($\beta = .21, p \leq .05$). Figure 1 shows that if Consensus among employees is high, the relationship between Commitment-based management and knowledge sharing is stronger. Simple slopes analysis was conducted to test if the regression lines significantly differed from zero. If consensus among employees is high, the relation between Commitment-based Management and Knowledge sharing differs significantly from zero ($t(320) = 3,05, p \leq .01$). However, this is not the case when consensus among employees is low ($t(320) = -0,30, p \geq .05$).

Figure 1: High consensus among employees strengthens the relation between Commitment-based Management and knowledge sharing

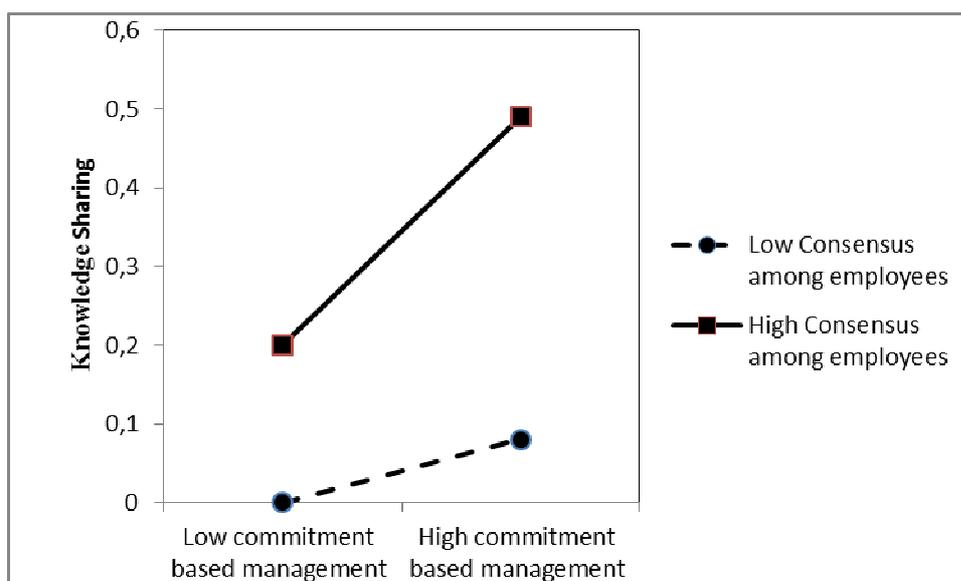


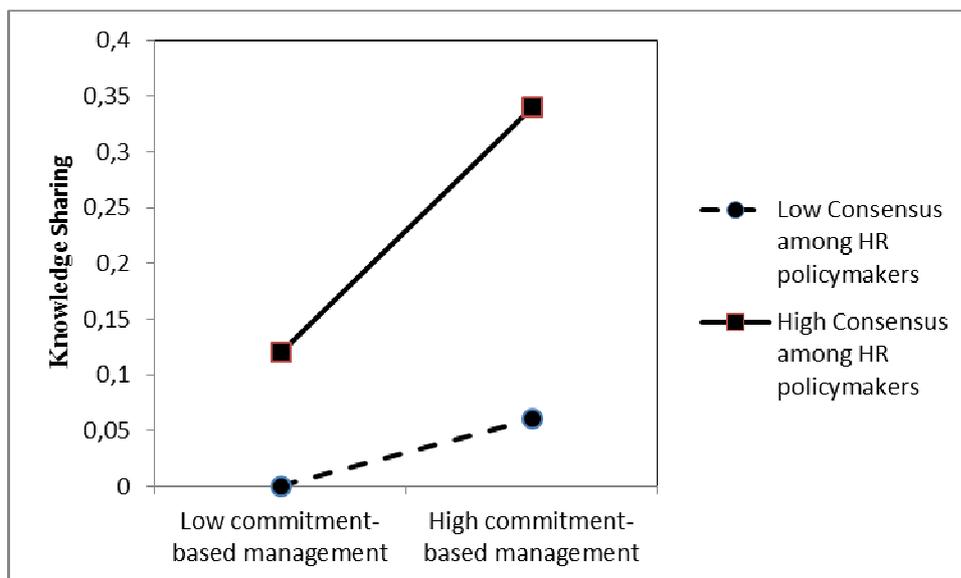
Table 2 Results of regression analyses with knowledge sharing as dependent variable and consensus as moderator

	Knowledge Sharing (hypothesis 1) (n=303)			Knowledge Sharing (hypothesis 2) (n=323)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Organization	.09	.09	.09	.16	.11	.10**
Contract	-.06	-.05	-.05	.02	.02	.01
Years employed in current job	.01	.01	.01	.00	.00	.00
Commitment-based management		.08	.06		.06	.06
Consensus among employees		.21**	.21**			
Perceived consensus among HR policymakers					.12*	.12*
Commitment-based management * Consensus among employees			.17*			
Commitment-based management * Perceived consensus among HR policymakers						.16*
Constant	2.76**	2.77**	2.76**	2.92**	2.94**	2.93**
R ²	.04	.11	.12	.05	.08	.09
FChange	4.08**	13.54**	3.96**	4.99**	5.16**	4.30*

**= $p \leq .01$; * = $p \leq .05$.

Hypothesis 2 predicted that the relation between Commitment-based Management and knowledge sharing was strengthened by perceived consensus among HR policymakers. Table 2 shows that this hypothesis is accepted ($\beta = .16, p \leq .05$). Also a main effect of perceived consensus among HR policymakers was found ($\beta = .12, p \leq .05$). The moderating effect of perceived consensus among HR policymakers is displayed in Figure 2. When perceived consensus among policymakers is high, the relation between Commitment-based Management and knowledge sharing is stronger.

Figure 2: High consensus strengthens the relation between Commitment-based Management and knowledge sharing



Simple slopes analysis was conducted to test if the regression lines significantly differed from zero. If perceived consensus among HR policymakers is high, the relation between Commitment-based Management and Knowledge sharing differs significantly from zero ($t(300) = 2.01, p \leq .01$). However, this is not the case when perceived consensus among HR policymakers is low ($t(300) = -0.22, p \geq .05$).

The difference of the two theories is small: consensus among employees explains 12

per cent of the variation, whereas consensus among HR principals explains 9 per cent of the variation.

On explanatory basis, the relation between Commitment-based Management, knowledge sharing and collectivism was explored. As Table 3 shows, a main effect of Commitment-based Management was found ($\beta = .14, p \leq .01$) as well as a main effect of collectivistic orientation was found ($\beta = .15, p \leq .01$).

Table 3 Results of regression analyses with knowledge sharing as dependent variable and collectivism as moderator (n=324)

Knowledge Sharing field study (n=322)			
	Model 1	Model 2	Model 3
Organization	.18**	.14**	.14**
Contract	.01	.00	.00
Years employed in current job	.00	.00	.00
Commitment-based management		.12*	.12*
Collectivistic orientation		.14**	.14**
Commitment-based management * Collectivistic orientation			-.01
Constant	2.91**	2.92**	2.92**
R ²	.06	.13	.13
FChange	6.46**	13.66**	.02

**= $p \leq .01$; *= $p \leq .05$.

Discussion

The purpose of this research was to unravel a piece of the black box by answering the question of how the process of HRM practices contributes to knowledge sharing, whereby the focus lay on how Commitment-based Management was perceived by employees. Consensus among employees (Kelley, 1973) and consensus among HR principals (Bowen & Ostroff, 2004) were theorized to have moderating effects in the relationship between Commitment-based Management and knowledge sharing. Also collectivism was taken into account with the relationship between HRM and knowledge sharing. The research was located in the east of the Netherlands.

Consensus among employees strengthened the relation between Commitment-based Management and knowledge sharing, thereby confirming the first hypothesis.

Perceived consensus among HR principals strengthened the relation between Commitment-based Management and knowledge sharing. When perceived consensus among HR policymakers was high, the relation between Commitment-based Management and knowledge sharing was stronger. This finding confirmed hypothesis 2. In sum, both the theory of Bowen & Ostroff (2004) about consensus among HR principals, as well as Kelley's (1973) theory about consensus among individuals, strengthen the relation between Commitment-based Management and knowledge sharing. Also, both theories explain almost the same amount of variance, therefore it is not possible to say which one explains the relation between Commitment-based Management and knowledge sharing better. Both shed a different light, and are equally important.

Collectivistic orientation did not strengthen the relation between Commitment-based Management and knowledge sharing. This indicates that collectivistic orientation is not a factor of importance in the relation between Commitment-based Management, consensus among employees or consensus among HR principals and knowledge sharing. It is possible

that other cultural factors play a role in this relationship.

A main effect of collectivistic orientation on knowledge sharing was found, this indicates that in the Netherlands, the trusting environment associated with collectivism (Michailova and Hutchings, 2006) has a positive effect on knowledge sharing.

Strengths and limitations

Strength of this research is that employees from four different companies filled in the questionnaires. This acted as a control for different environmental factors. Also the focus on this study was as Li et. al (2010) and Sanders et al. (2008) proposes, on how employees perceive HR practices, instead of intended HR practices. This research gives an insight into the process of HRM. A study including consistency and distinctiveness, next to consensus should predict much more. Further research should focus on researching the whole picture. Next to this, it would be interesting to see if the same results count for other dependent variables than knowledge sharing, for example affective commitment.

As this research only measured collectivistic orientation, it still showed that cultural orientation does matter. This research was conducted in the east of the Netherlands, thus it is questionable if the results could be generalized to companies in different parts of the Netherlands. Further research should focus on a sample including different industries all over the Netherlands. Also, it would be interesting to see how - next to cultural orientation - cultural factors worldwide influence the relationship between Commitment-based Management, consensus and knowledge sharing.

The design of this study was both its strength and its weakness. Strength was that this research measured both the content and the process. The scenario made it difficult to compare consensus among employees and consensus among HR principals, and which explained most. Strength was that the scenario did provide a good and comprehensible background for the

questions that followed it. Common method bias was reduced because managers specifically asked in their mail to fill out the questionnaire truthfully, so that HR policy could be improved. Also the questionnaires were processed anonymously. The questionnaire came in two companies right after a research about employee satisfaction, this resulted in low responses.

Implications

The implications of this study are that a high investment in employees, referred to as the content of HRM has little or no effects on knowledge sharing without a proper process of HRM. Therefore consensus among employees as well as perceived consensus among HR principals must be advocated. Little consensus among employees should warn HR policymakers that their good intentions do not land, resulting in less knowledge sharing.

Consensus among HR principals is important, because if employees perceive HR principals as agreeing about HR policy, they share more knowledge. Theoretical implications are that these conclusions are an interesting insight in the black box of HRM. Consensus among employees as well as perceived consensus among HR principals are an important part of explaining why Commitment-based Management has positive effects on knowledge sharing. In the future more process orientated research, including consistency and distinctiveness is necessary to unravel more parts of the black box. Composing one short questionnaire wherein all Hofstede's (1981) cultural factors are present should make future comparison of results easier, and would make the external validity of research higher. In sum, consensus among employees as well as consensus among HR principals need to be advocated for their strong positive effects on the relation between Commitment-based Management and knowledge sharing.

Appendix A

The Following scenario was administered:

“You are employed as product developer within a company that manufactures high-quality and innovative electronic products. Your task is to design and develop new ideas and products.

Next to the product development department, the company’s management is supported by four other departments: the financial department is responsible for all financial activities. The personnel- or Human Resource department is responsible for all employee related affairs. The IT department provides support all computerized systems within the company. Finally, the department of Communication facilitates all internal and external communication of the company.

The management desires to create an atmosphere in which every employees can make use of their talents and perform as best as possible. Within your own department management activity involves all employees in major decisions and opinions are taken seriously.

Moreover, management has arranged that the financial department reserves a budget for development of the company’s employees. Also the costs for a home internet connection are refunded so that you can work at home. The IT department has laptops available, so that employees can work wherever they like. Besides this, there is the possibility to log on into the company’s network from home. The department of Communication makes sure that all employees are informed of important management decisions”.

Appendix B

Table 6: Scenario manipulations

Attribution	Since the time you have worked in this company you have noticed that the personnel department
High consensus among employees	<ul style="list-style-type: none">• Usually takes measures that are experienced by you, as well as your colleagues in the same way.• Offers training and learning that are equally valued by both you and your colleagues.
Low consensus among employees	<ul style="list-style-type: none">• Usually takes measures that you and your colleagues experience differently• Offers training and learning that are differently valued by both you and your colleagues

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