Managing the Balance;

Researching employee behavior and well-being from a Balanced perspective using People management, AMO and OCB.

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ABSTRACT

Public service delivery organizations are under pressure. The government demands public organizations to focus more and more on efficiency and effectiveness. Organizations within the public service sector are forced to cut back and become more efficient. However in order to justify the existence of public organizations, they need to deliver high quality public value, ergo, deliver a high quality public service. The elderly care sector is not an exception from this phenomenon. Especially in public service organizations, such as the elderly care, the service delivery (public value) is strongly and directly influenced by the behavior of employees. By using empirical data from a survey among 421 frontline elderly care workers this article discusses the impact of people management on the behavior of employees, both task and non-task (OCB) behavior, and on employee well-being from a balanced approach. The results indicate that the effect of people management on behavior and employee well-being is often, at least partly, mediated by the AMO (abilities, motivation and opportunities) concepts. Both the abilities dimension and motivation dimension often have a direct impact on the behavior of employees whereas the opportunities dimension is suggested to be, at least partly, mediated by abilities in several occasions. In respect to employee well-being both opportunities and motivation have a direct influence. The concept of abilities does not have an effect on employee well-being. The results show differences, but no conflicting mechanisms between the antecedents of behavior and those of employee well-being.

Keywords: people management, AMO theory, public service motivation (PSM), self determination theory (SDT), organizational citizenship behavior (OCB), employee well-being, balanced approach.

INTRODUCTION

HRM, especially the relationship between HRM and Performance, has been a subject of academic interest for decades (Guest, 1997), resulting in the common assumption that there is a positive link between HRM and performance. Both Arthur (1994) and Huselid (1995) have set the foundation for this assumption. However, the mechanisms that influence this relationship have received increasingly more attention since 1997. In 1997 Guest argued that in order for the HRM - performance research to develop further, there needs to be more attention for the mechanisms that relate HRM to performance. These mechanisms have often been referred to as the black-box (Wright & Nishii, 2006; Paauwe, 2004; Boselie et al. 2005). As discussed by Boselie et al. (2005) different researchers use different theories to explore the black-box. However, the most frequently used theory is the AMO theory (Abilities, Motivation and Opportunities). The interest in the HRM – performance relationship originated in the private sector. However, HRM is becoming a topic of interest in the public sector. With the rise of New Public Management (NPM), Public Service Motivation (PSM) and the public value discussion (Stark, 2002; Perry & Wise 1990; Rainey et al., 2008), there are many connections to be made with HRM and HRM theories. This research will combine the current HRM theories with current public management theories.

The basic model for this research is build up from a combination of the models of Guest (1997), Delery & Shaw (2001) and De Winne & Sels (2003). All three propose that the relationship between HRM practices and performance is mediated by either workforce characteristics and workforce performance (Delery & Shaw, 2001), employee attitudes and employee behavior (De Winne & Sels, 2003) or HRM outcomes and behavior outcomes (Guest 1997). In the current research a distinction will be made between HRM outcomes and employee attitude, resulting in a four stage model instead of a three stage model as suggested by Guest (1997), Delery & Shaw (2001) and De Winne & Sels (2003). Following the lead of

Nishi and Wright (2007) the starting point of this research will be the perceived HR practices. It is the employees' perception that has an effect on their attitudes and behavior. Based on all this, the basic conceptual model of this research is shown in figure 1.

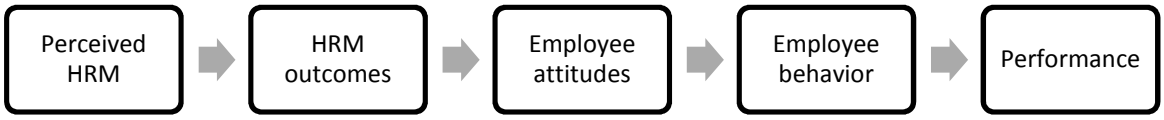


Figure 1. Basic conceptual model.

The current research will focus on the relationship between the perceived HR practices and employee behavior, from a balanced approach (Deephouse, 1999; Paauwe, 2009; Boselie, 2010). This approach argues that HRM should not be solely focused on organizational outcomes, such as performance, but also on the employee outcomes, such as well-being. Therefore both organizational outcomes (employee behavior) and employee outcomes (employee well-being) will be investigated within this research. The concept of performance will not be empirically measured. As Paauwe (2004), Behn (2003) and Boselie et al. (2005) all mention, performance is a (multidimensional) concept that can be measured in many different ways. The concept of performance is in this research seen as delivering public value. Measuring this would include a completely different level of analysis than in case of the rest of the HRM chain, which is measured at the individual employee level.

The aim of this research is to explore the relationships between the different fragments of the HRM chain. The theoretical framework will be based on both HRM theories (resource based view and social exchange theory) and public management 'theories' (new public management and public values). Many researchers use the theories, however it is not often that these are combined. In combining the theories, this research aims to contribute to the knowledge of the academic HRM field and the public management field on the mechanisms within the black-box. This research will attempt to provide a holistic overview of the

relationships, providing new interesting questions for further research.

First, this article will discuss the relationships between the theories. Based on this theoretical framework the hypotheses will be formulated. In the second section the methods will be discussed as well as the measurement of the different variables and techniques for statistical analysis that will be used, such as multilevel and mediation. In the third section the results will be given, followed by a discussion of the results in light of the theories and prior research. The article will conclude with a reflection on the research and recommendations for further research.

HRM THEORIES

The current research draws from two main HRM theories: 1) Resource Based View (RBV) (Barney, 1991; 2001) and 2) the Social Exchange Theory (SET) (Blau, 1964). In the RBV employees are seen as valuable inimitable recourses that can be used to reach competitive advantage over other organizations (Delery & Shaw, 2001). The aim of HRM in the RBV is creating, managing and controlling a human capital pool that is aimed at sustainable competitive advantage. The HR practices should be aimed at both horizontal and vertical fit (De Winne & Sels, 2003). The horizontal fit is focused on the fit between all the HR practices. The vertical fit is focused at the fit between HR practices and organizational goals. Behavior in the RBV is driven by rationality in both HR practices and in employee choices. Knies (2012) describes this as the cognitive path.

In the SET employees are still seen as a way to achieve performance. However, the way that HRM is used to achieve performance is different. The SET approaches HRM and the impact of HRM on employees on a social relationship level. In the SET, behavior is formed by means of the exchange relationship that is created. The choices are not necessarily based on rational choice (Cole, Schaninger and Harris, 2002). The exchange relationship can be between manager and employee (LMX), between the organization and the employee (POS) or

between the team and the employee (TMX) (Cole, Schaninger and Harris, 2002). The impact of HRM is thus not seen as instrumental, but as social and relational steering behavior in the preferred direction. Knies (2012) describes this as the affective path. Although both approaches, RBV and CET, have a different approach, they are not mutually exclusive.

In this research two theories that combine both the RBV and SET will be used to explore the behavior of employees. Firstly, the people management theory will be used as operationalization for the perceived HR practices stage of the model. The people management theory combines the RBV and the SET. Purcell and Hutchinson (2007) argue that the employees perception of HRM is not solely determined by the HR practices that are implemented. The perception of the employee is also influenced by the leadership behavior of the manager. Whereas the implemented HR practices can be seen as a RBV component and the cognitive path, the leadership behavior and interpersonal relationship is strongly related to the SET approach and the affective path.

Secondly, in the current research the black-box will be explored by means of the AMO theory (Appelbaum et al., 2000) filling in both the HR outcomes (abilities and opportunities) and the employee attitudes (motivation) stage of the model. The RBV approach can be related to both the abilities and opportunities dimension, whereas the SET approach can be related to both the opportunities and motivation dimension. The abilities dimension focuses on the cognitive path and therefore can be related to the RBV. The opportunities dimension will focus in this research not solely on the autonomy employees perceive (related to the LMX and SET) (Appelbaum et al., 2000). The dimension will also focus on the support given by direct co-workers (related to TMX) and on the more instrumental prerequisite side of opportunities (related to RBV). The motivation dimension focuses on two theories that can be related to CET, the self determination theory and public service motivation. The latter will be discussed later on in this article. Both motivation theories assume that motivation is a combination of

both internal and external (context) mechanisms that influence the motivation of individuals. As Vandenabeele (2007) describes, motivation is an interplay between identity and institutions. The interplay between these two aspects can be seen as a relational aspect relating motivation to the SET at the organizational level (POS). The current research will see motivation as an employee attitude, distinguishing it from the HR outcomes. Not only does Knies (2012) find that the effect of autonomy (opportunities dimension) on behavior is partly mediated by motivation; the Self Determination Theory (SDT) also assumes that motivation is influenced by the fulfillment of the need for competence (ability), autonomy (opportunities) and relatedness (Gagné en Deci, 2005; Deci en Ryan, 2000).

The SDT will be used in this research to explore the influence of motivation. Motivation will be defined as*: "… the forces that energize, direct, and sustain behavior"* (Perry and Porter 1982 in Perry, Hondgenhem and Wise, 2010, p. 681). The SDT is build on the notion of intrinsic and extrinsic motivation, but nuances this distinction on the self determination continuum scale. The self determination continuum is based on the autonomous motivation. The intrinsic motivation has the highest degree of autonomous motivation and the extrinsic motivation or external regulation the lowest (Ryan & Deci, 2000).

Both the RVB and the SET are aimed at directing the behavior of employees in order to achieve organizational outcomes. As discussed in the introduction, performance is seen in this research as delivering public value, ergo, delivering public service. In this research the focus will be on the behavior that contributes to this form of performance. Two forms of behavior are included based on the organizational citizenship behavior theory, namely task behavior and non-task behavior. The non-task behavior is referred to as OCBI, behavior towards individual co-workers, and OCBO, behavior towards the team/organization. Organizational citizenship behavior can be approached from both the RVB view and the SET view. From the RBV perspective, employees will be more likely to show a high quality of

task behavior when their abilities and opportunities are adapted to the requested behavior; cognitive behavior. From the SET perspective, employees will be more inclined to show both non-task and task behavior when the social exchange relationship between both manager (LMX) and team (TMX) is strong; affective behavior.

PUBLIC MANAGEMENT THEORIES

In the public sector the New Public Management (NPM) has received quite some attention over the last decades. Hood (1991) describes the origin and content of the NPM. According to Hood, the concept of NPM has been used in many different ways. However, there is always a core element present: NPM is focused at efficiency and effectiveness, but also at output control. As discussed earlier, public organizations receive increasing pressure from the government to become more efficient and effective. This pressure from the government can be seen as an attempt to implement NPM or at least some aspects of NPM in public organizations. This is also the case in the elderly care sector. In the last decade control systems have been implemented in the elderly care, not focusing on the outcome, i.e. delivering public value, but at the output, i.e. number of incidents etc. (Visie stuurgroep VV&T, 2011). As Rainey (2009) describes, public organizations often have multiple and ambiguous goals. These goals do not solely include productivity, i.e. efficiency and effectiveness. They also include delivering public value, i.e. delivering a high quality of care and moral obligations towards clients. With organizations having multiple goals, it becomes more complex to determine what performance actually is. The concept of performance is used in many different operationalizations within the public sector. Researchers have not been able to agree on one single operationalization for measuring performance in the public sector (Brewer, Walker & Boyne, 2010). Nor is there a single operationalization that is used within the private sector (Boselie, 2005). As Behn (2003) describes, different purposes for performance measurement ask for different performance measurements. Although this

research does not empirically measure performance, it should be clear what is seen as performance in this research. In the current research setting, performance is seen as delivering a high quality of care, focused on delivering public value. Rainey, Koehler and Jung (2008) describe that public values derive from what the citizens desire; outcomes, public values, are societal based constructs. This means that task behavior should be aimed at achieving this goal. Based on Van Bijsteren (2011) and Onwezen (2011) task behavior in the elderly care setting has been operationalized into three dimensions: attention for clients, respect for clients and individual approach of clients.

For many employees delivering care or delivering the public value is a large part of their motivation. This aspect of motivation has been researched and classified as Public Service Motivation (PSM). PSM has been defined as *"the belief, values and attitudes that go beyond self-interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly whenever appropriate"* (Vandenabeele, 2007, p.547). Based on the setting of the research, the elderly care sector, PSM is assumed to play an important role. This means that in the motivation dimension of the AMO theory, PSM will be included. In this research the public context will be present in the motivation aspects and the task behavior aspect.

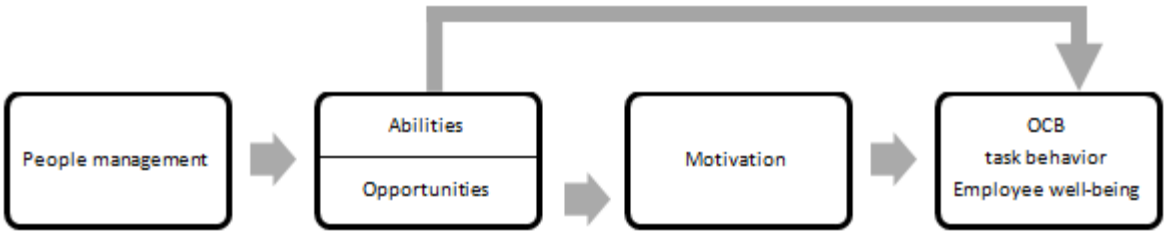
BALANCED APPROACH

All aspects that have been discussed up till this point have been focused on the organizational outcomes, i.e. on managing the human resources in such a way that their behavior contributes to organizational goals and outcomes. However, from a balanced approach, organizations also have the responsibility towards their employees to focus at employee outcomes (Deephouse, 1999; Boselie, 2010; Paauwe, 2009). In this research, in addition to task behavior and OCB, there will also be attention for employee well-being. Employee well-being can be approached from an instrumental point of view. Some researchers have found employee well-being to be

positively related to behavior and other organizational outcomes as describe by both Grant et al. (2007) and Van De Voorde et al. (2011). However this research is not interested in the influence of employee well-being on organizational outcomes. Employee well-being is seen as an outcome 'an sich' based on the balanced approach. However, this research is interested in the possible trade off, or mutual gains & conflicting outcomes perspective, between organizational outcomes and employee well-being (Grant et al., 2007; Van de Voorde et al., 2011). Whereas the mutual gains perspective assumes that HR practices, HR outcomes and employee attitudes, that have a positive effect on organizational outcomes, will also have a positive effect on employee outcomes, the conflicting outcomes perspective assumes that there could be a tradeoff between the organizational and employee outcomes. Van de Voorde (2011) found evidence for both perspectives based on an overview of earlier conducted research. Both the happiness and relationship dimensions of employee well-being (Grant et al., 2007) were related to organizational outcomes by means of a mutual gains perspective. For the health related dimension of well-being (Grant et al., 2007) there was more support for the conflicting outcomes perspective (Van de Voorde et al., 2011). The dimensions of well-being are based on psychological (happiness), physical (health) and social well-being (relationship). These are the three key dimensions of well-being, because they cover the core aspects of human functioning (Grant et al., 2007). Or as Grant et al. state: *"These are the three key dimensions of well-being because they are valued as end in and of themselves rather than means to other ends (see Finn, 1992)."* (Grant et al, 2007, p.53)

RESEARCH MODEL AND HYPOTHESES

Based on the theoretical framework that has been discussed, the research model is presented in figure 3.



1a: The relationship between people management and OCB is mediated by the different AMO dimensions.

1b: The relationship between opportunities and OCB is mediated by motivation.

2a: The relationship between people management and task behavior is mediated by the different AMO dimensions.

2b: The relationship between opportunity and task behavior is mediated by motivation.

3a: The relationship between people management and employee well-being is mediated by the different AMO dimensions.

3b: The relationship between opportunity and employee well-being is mediated by motivation.

4a: There are mutual gains between the antecedents of behavior and the happiness dimension of employee well-being.

4b: There are conflicting outcomes between the antecedent of behavior and the health dimension of employee well-being.

METHODS AND DATA

In this section both the survey and data, the analysis techniques and the measurements of both independent, mediating and dependent variables will be discussed.

Survey and data description

The data for the research has been obtained within one organization in the elderly care in the Netherlands. The organization has 31 elderly home locations and approximately the same number of extramural teams (teams that deliver care at the client's individual house). In total the organization has approximately 4000 employees. The data has been collected by means of paper surveys. In this research using an internet based survey with electronically invitations would, presumably, lead to a high non-response because many employees do not use their email. In total 69 teams, distributed over 19 locations have participated in the research. The sample is based on the distribution among the locations and intramural and extramural teams, in order to create a sample that is representative for the organization and the sector. 1027 surveys have been distributed and 693 have been returned. This is a response of 67,5%. The non-response is not distributed equal among the participating teams. Some teams had a response of 100%, some around 30%. Unfortunately, systematic non-response based on either the independent or dependent variables cannot be excluded, because there is no prior knowledge of teams scores on these variables. The paper surveys were distributed by the team managers. Employees were able to return the completed surveys without interference of the team manager. Each team that participated in the research had a results meeting after filling in the surveys. The intention of these meetings was two folded; firstly to give the research a practical relevance for the teams and, secondly, to increase the participation and the survey response rate.

This research is focused on measuring the perceptions and attitudes of employees. The research design is a single source research, which can have several causes for research bias.

All the variables are measured by means of employee perceptions. In the case of HR practices this is actually the best measurement; as stated by Nishi & Wright (2007), it is the employees' perception of the HR practices that actually has an impact. This is also the case for the ability and opportunity variables. It does not matter what the actual situation is, it is the experienced and perceived situation that effects the employees' motivation and behavior. However, measuring these variables in such a way can create three forms of research bias: social desirability, negative affectivity (tendency towards the negative scores) and acquiescence (tendency towards the positive scores). In this research an attempt has been made to reduce these biases to a minimum by focusing on personal experience and not on values, and by creating a return structure that assured the anonymity of the respondents. However the possibility of bias cannot be completely ruled out.

The survey has been distributed among different types of teams within the organization. Both care employees, housekeeping employees and catering employees have been included in the research. The majority of the respondents consist of care employees (67,1 %) as shown in table 1a. The distribution male female is 91% female compared to 3,3% male (Table 1b). The most frequent education level is MBO 3. The average employee is 43,9 and has been working with the organization for 10,3 years (Table 1c and 1d). The distribution on education is comparable with the population distribution, in the gender distribution men are underrepresented. However gender is considered a control variable and therefore this underrepresentation will not have an effect on the results.

TABLE 1a Distribution among employee tasks

Variables		N	%
Task	Care	465	67,1
	Housekeeping	115	16,6
	Catering	26	3,8
	Missing	87	12,6
	Total	693	100,0

TABLE 1b Socio-demographic data

Variables		N	%
Gender	Male	23	3,3
	Female	635	91,6
	Missing	35	4,9
	Total	693	100,0
Education	Primary education	16	2,3
	Secondary school	135	19,5
	MBO 2	80	11,5
	MBO 3	258	37,2
	MBO 4	95	13,7
	HBO (Bachelor)	21	3
	WO (Bachelor/Master)	1	0,1
	Different	38	5,5
	Missing	49	7,1
	Total	693	100,0

TABLE 1c Distribution of age

	Min.	Max.	Mean
Age	17	66	43,9

(N=536, missing 157)

TABEL 1d Distribution of service years

	Mean	Std.
Service years	10,3	9,3

(N=617, missing 76)

Analysis techniques

The analysis techniques can be separated into two categories. Firstly, tests focus on the validity and reliability of the measured concepts. These tests are discussed in later sections of the methodology section. Secondly, the hypotheses are tested. These tests will be discussed in the results section of the paper.

Testing construct validity and reliability.

In this research multiple latent concepts are measured. In order to test the construct validity a Confirmatory Factor Analysis will be conducted (CFA). In the CFA the construct structure is determined prior to the tests, based on theory. This analysis allows entering a complete structure consisting of multiple (correlating) factors (or latent concepts) that have been measured by means of multiple items. In this research the assumption of normality has been violated, for both dependent and independent variables. Therefore the CFA is conducted with the Satorra-Bentler test with robust errors (Kolenikov, without date). The CFA is conducted by the use of STATA. For the CFA the additional CFA package of Stanislav Kolenikov is installed (Kolenikov, without date). Next to the CFA, the choice was made to use the Cronbach's Alpha measurement as a reliability instrument because it is the most frequently used and widely accepted instrument in social science.

Testing the hypotheses

Due to the research design it is not possible to test causality. Because of the cross-sectional dataset, all tests are focused on testing relationships between dependent and independent variables assuming that the independent variables influence the dependent variable without actually testing for causality.

Testing the hypotheses is done by means of multilevel analysis by using STATA. In the research 69 teams are involved. It is possible that part of the variance exists not only at the

individual level, but also at the team level. This assumption is implicit in the model, because the role of the team manger is large within the people management concept. To test whether or not this assumption is correct, a null model is tested with each dependent variable, in order to assess the ICC (interclass correlation). If the ICC is 0, there is no reason to perform a multilevel analysis, all the variance exists at the individual level. If the ICC is close to 1, most of the variance is at the group/team level. In the analysis both level 1 predictors can be included (individual level) and level 2 predictors can be included (team level). In the current research only level 1 predictors are included. The multilevel analysis is used in this research to control for the impact of the team level. Including all the teams as dummy variables in a linear regression would have an immense negative impact on the statistical power of the tests. For this research the multilevel technique is used with random intercept. Due to the theoretical and empirical foundation of the model no random slopes testing is performed. The assumption is that the direction of the relationships is the same for all teams. However, the strength of the relationship may vary. Focusing on the fixed effects (the coefficients of the independent variables) a Maximum Likelihood (ML) multilevel analysis is used (Hox, 2002). This means that it is difficult to compare the random effect outcomes (variance at group level τ^2 and variance at the individual level σ^2) of the different steps, because ML is less accurate in this estimation. In order to give a more accurate estimation of the random effects (variance), a Restricted Maximum Likelihood (REML) test should be performed (Hox, 2002). This research focuses on the relationships between the fixed effects and dependent variable, so the tests were limited to ML. The variance indicators (τ^2 and σ^2) give an indication of the level of unexplained variance. The R^2_1, explained variance at individual level, is calculated by subtracting the variance (σ^2) of the extended model from the base model, divided by the variance of the base model. The R^2_2, explained variance at group level, is calculated by the same method using τ^2 (Hox, 2002).

$$R_1^2 = \frac{(\sigma^2_{e|b} - \sigma^2_{e|m})}{\sigma^2_{e|b}}$$

$$R_2^2 = \frac{(\sigma^2_{u_0|b} - \sigma^2_{u_0|m})}{\sigma^2_{u_0|b}}$$ (Hox, 2002, p. 64)

The base model is always the null-model. This means that the R^2 indicates the explained variance in comparison to the null-model. The model fit is tested by means of the deviance test, suitable for testing model fit of nested models (Hox 2002). Finally, the multilevel test is performed using the bootstrap method. Although the data consists of 69 groups and in total 693 respondents, the data is considered small for multilevel analysis. Missing cases were excluded list wise, resulting in 67 groups with an average of 6,7 respondents in each second level unit (total of 421 respondents). The number of first level units (respondents) within the second level units is small (Kreft, 1996 in Hox 2002). Furthermore, as mentioned earlier, the data violates the assumption of normality. In cases like this, Hox (2002) suggests to perform a bootstrap method for robust results. The bootstrap is performed by bootstrapping the cases. The results of the explanatory variables are not expected to be stable as with an experiment, so bootstrapping the cases is justifiable (Hox, 2002; Lockwood & MacKinnon, without date).

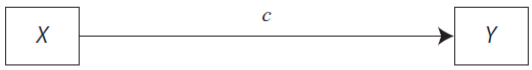
Mediation

The conceptual model assumes several mediation effects within the data. According to Baron and Kenny (1986), in order for a mediation effect to be present, there needs to be a correlation between independent (X), mediating (M) and dependent (Y) variable; between X and M, X and Y and M and Y. Normally, this would be tested by conducting several regression analyses. In this research the focus is not on the mediation effect of the individual mediators. The focus is on the mediation effect of the concepts of opportunity, ability and motivation. This means that there will be no regressions with and on all the individual

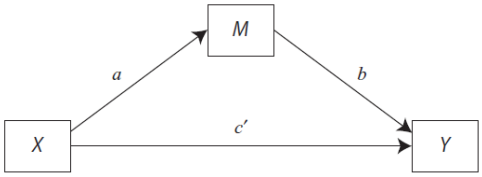
mediating variables. In order to comply with the rules of mediation, a partial correlation matrix (controlling for age, gender, education and service years) is used as correlation results between the independent and individual mediating variables.

As stated before, this research is focusing on a holistic view of the complete HRM chain. In doing so, we use multiple mediators, which are related to the same theoretical concept, in one mediation step. The hypotheses testing is done in four steps. First the null model is executed, followed by the first step including the control variables and the people management variables. The second step includes the opportunity variables. The third step includes the ability variable and the fourth step includes the motivation variables. As Preacher and Hayes (2008) described, it is possible to use multiple mediators, even within the same step.

A: No mediator model



B: Single mediator model



C: Multiple mediator model

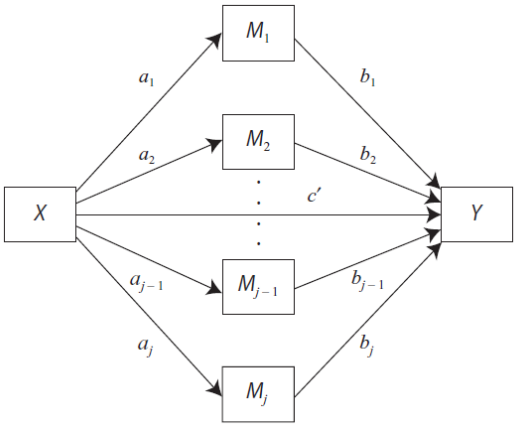


Figure 5 (A,B,C). Mediating models (Preacher and Hayes,2008)

In testing multiple mediators in several mediating steps, it is not possible to test the significance of the mediation effect by the use of the Sobel test. The Sobel test focuses on the

A and *B* paths. Seeing that in this research there are $_j$ mediators, there are also a_j and b_j paths that should be tested separately in order to perform the Sobel test and see the significance of the mediating effect of all the individual mediators. Instead, this research will focus on the *c* and *c'*. As McKinnon et al. (2002) describe, the significance of the mediation effect can also be tested by dividing the sum of c-c' by the standard error of McGuigan and Langholtz. This standard error is calculated by means of the following formula:

$$\sigma_{\text{McGuigan-Langholtz}} = \sqrt{\sigma_{\tau}^2 + \sigma_{\tau'}^2 - 2(\rho_{\tau\tau'}\sigma_{\tau}\sigma_{\tau'})}.$$

Where the ($\rho_{\tau\tau'}\sigma_{\tau}\sigma_{\tau'}$) is equal to the MSE[1] divided by the product of N and the variance of X. The results of this test are equal to a T-score and can be tested for significance by means of the T-distribution. The use of this form of significance testing allows us to test the significance of the set of mediating variables and not one specific mediating variable. When the results show a significant mediation this will be explicitly mentioned. When the mediation effects are not significant, the results will be formulated as indication or as suggestion of mediation.

In this research there is the possibility of common source bias. The common source bias assumes that there will be a high correlation between the different concepts because they are all perceptions filled in by the same source (the respondent/employee). Spector (2006) argues that the correlation between the self reported variables is minimal. This argumentation is among others based on the result of Boswell, Boudreau, and Dunford (2004). The common source bias is tested through means of a single factor solution in a CFA (Bagozzi et al., 1991). The CFA shows that there is no underlying factor among all variables (RMSEA .091 CFI

[1] The MSE is calculated by means of a linear regression, including all the groups as dummy variables.

.109). Therefore there is no support found that common source bias is significantly influencing the research.

Measurement of independent and mediating variables[2]

People management

The measurement of the concept of people management is based on the measurement developed by Knies (2012). The Confirmatory Factor Analysis (CFA) shows acceptable results for all fit tests (RMSEA .0540 CFI .9712). The complete measurement scale consists of five dimensions: HR activities focusing on the present, HR activities focusing on (personal) development, HR tailor fit, support in daily functioning and support in personal development.

Table 2a Non-standardized factor loadings for CFA people management

	Non-st. B	
HR practices development (Cronbach's Alpha .7391)		
Education and personal development	1	
Moving on to a different function	1.24	**
HR practices current (Cronbach's Alpha .7353)		
Task relief and task change	1	
Vitality and a healthy, save working environment	1.10	**
Work- home balance	1.01	**
Tailor fit HR (Cronbach's Alpha .8496).		
My team manager makes arrangements with me that fit my personal situation	1	
My team manager makes individual arrangements with me (on working hours, education possibilities) that allow me to do my work better.	1.09	**
Team manager support daily functioning (Cronbach's Alpha .9178)		
My team manager shows interest for the way I do my work	1	
My team manager shows interest for my personal functioning	.96	**
My team manager shows appreciation for the work I do	.91	**
Team manager support personal development (Cronbach's Alpha .8783)		
My team manager draws my attention to possibilities for further education	1	
My team manager helps me to make promotion	1.05	**
My team manager helps me to move to another function at the same level as my current function.	.98	**

[2] All of the variables have been measured on a 5 point Linkert scale. All statements were given to the respondents in Dutch. The statements given in this article are the English translations.

HR outcomes; opportunities, abilities and motivation[3]

The dimension opportunities is measured by autonomy, operationalized based on Knies, 2012 and by possibilities for participation, material prerequisites, non-material prerequisites and co-worker support, operationalized based on Bijsteren (2011) and Onwezen (2011). The autonomy scale and the participation scale are included into one CFA based on the theoretical notion that these two scales together cover the concept of opportunities as discussed in the AMO theory by Appelbaum et al (2000). (RMSEA .058 CFI .993) The material prerequisites scale and the non-material prerequisites scale shows very strong fit indicators (RMSEA .000 CFI .998). The co-worker support scale shows a strong fit (RMSEA .0509 CFI .9644) (CFA also included OCB).

The concept of abilities is measured by six items based on both contextual abilities and general abilities formulated by Knies (2012) and is showing an acceptable fit (RMSEA .07 CFI .9644).

The dimension motivation is measured by means of the SDT motivation scale based on Vandenabeele (2008) and short proxies PSM scale (Taylor 2008). The SDT motivation scale consists of 7 items of Vandenabeele, complemented with one item out of the Gagne et al (2010) scale. The CFA of the motivation scales shows a good fit (RMSEA .03 CFI .988). For the analysis the SDT RAI score is constructed.

[3] When existing measurement scales have been used, the items have been rephrased for the respondents to understand the statement correctly. Existing scales are often formulated for higher educated employees whereas the respondents in this research are mainly lower educated employees.

Table 2b Non-standardized factor loadings for CFA opportunities, abilities and motivation

	Non-st. B	
Autonomy (Cronbach's Alpha .7847)		
In my function I have the opportunity to use my knowledge and my skills	1	**
In the execution of my tasks I have enough decision authority	.87	**
I feel at my place in my function	.86	**
Participation (Cronbach's Alpha .7327)		
During the team meeting I have enough space to have input	1	**
My team manager invites me to give my opinion	1.12	**
Material prerequisites (Cronbach's Alpha .7431)		
There are enough materials present to execute my care tasks (bandages ed.)	1	
There is enough equipment (such as lifts) to execute my care tasks	.75	**
Non-material prerequisites (Cronbach's Alpha .6186)		
I can perform my tasks with clients without disturbances	1	
I have enough time per client to perform my tasks	.97	**
Co-worker support (Cronbach's Alpha .8906)		
My direct co-workers support me in the execution of my tasks	1	
My direct co-workers show interest in my personal situation	1.06	**
My direct co-workers give me advice in difficult situations	1.12	**
My direct co-workers help me when I need help	1.08	**
Abilities (Cronbach's Alpha .7479)		
I know what the importance of the service is (care, administration and support) that we deliver	1	
I have enough knowledge to execute my care tasks.	1.30	**
I am capable to communicate with the family of clients	1.15	**
I am capable to show empathy for the situation of my clients.	1.48	**
I can keep my calm in different work situations	1.17	**
I can relate to the personal situation of my clients	1.33	**
Intrinsic (Cronbach's alpha r=.828)		
Because I like my job	1	
Because I enjoy it	.99	***
Identified (Cronbach's alpha r=.581)		
Because the job connects to things that I find important	1	
Because I want to be a good caretaker	1.09	***
Introjected (Cronbach's alpha r=.782)		
Because I will feel guilty otherwise	1	
Because I will feel bad otherwise	.86	***
Extrinsic (Cronbach's alpha r=.733)		
Because I will get problems otherwise	1	
Because I will get a bad evaluation otherwise	1.03	***
PSM (Cronbach's alpha r=.604)		
Because I find it important to help other people in my work	1	
Because I find it important to make a contribution to society	.90	***

Correlation is significant at level <0,01**

Measurement of dependent variables

Employee behavior

Based on the research of Bijsteren (2011) and Onwezen (2011) task performance is operationalized in three dimensions; 1) personal attention, 2) respect and 3) individual care fit. CFA shows a good fit (RMSEA .0569 CFI .9492).

OCB is measured by means of an OCBI scale and OCBO scale both based on the Lee & Allen (2002) scale. The CFA fit overall is acceptable (RMSEA .0509 CFI .9644).

Table 2c Non-standardized factor loadings for CFA behavior

	Non-st. B	
Attention (Cronbach's Alpha .7201)		
During my work I often make small talk with my clients.	1	**
I listen to the problems of my clients	1.39	**
When problems occur I will look for a solution with the clients	1.35	**
Respect (Cronbach's Alpha .7139)		
I do not argue with clients about their norms and values (such as religion or room decorations)	1	**
I give my clients information about the actions that I take (such as new medication or delays)	.98	**
I always keep my appointments and deals with my clients	1.15	**
I respect the personal space of my clients (such as with toilet use)	1.04	**
Individualistic approach (Cronbach's Alpha .7445)		
I meet the wishes of my clients	1	**
I keep the personal rituals of my clients intact	1.11	**
I involve my clients in the choices that need to be made	1.03	**
OCBI (Cronbach's Alpha .8024)		
I help co-workers in solving work related problems, even if I have to stay a bit longer	1	
I try hard to make new co-workers to feel welcome	1.12	**
I help co-workers with their tasks	1.20	**
OCBO (Cronbach's Alpha .6250)		
I am loyal towards my team	1	
I try to avoid problems within the team	1.10	**
Within the team I suggest new ideas to perform better	.94	**
Employee well-being		
Psychological well-being		
I am emotionally drained by my job		
I am tired when I get up in the morning and have to go to work.		
Job satisfaction		
Overall, I am satisfied with my job		
Physical well-being		
I have no health issues as a result of my job.		

Employee well-being

Based on (Grant *et al*. 2007), four items are included to measure employee well-being. Three items focus on psychological well-being and one on physical well-being. One of the items measuring psychological well-being is the often used job satisfaction item (Wanous et al., 1997). Although the CFA shows a very good fit (RMSEA .000 CFI .9964) the factor loadings and item error show a different picture (loadings between 1.08 and .50, errors between .29 and 1.22). Based on these results the choice is made to create three different dimensions of well-being; job satisfaction based on one item (Wanous, 1997), psychological well-being based on two items and physical well-being based on one item.

RESULTS

The results are discussed in three stages. Firstly the results of task behavior are discussed. Secondly the results with OCBI & OCBO as dependent variables are discussed. Thirdly, the results on employee well-being are discussed. Based on the partial correlation matrix (appendix 2) all suggested mediation paths are possible.

Results of task behavior

The results of task behavior are discussed based on the three sub dimensions of task behavior.

In respect to the dimension attention for client, the model indicates that the impact of the people management variables on attention for clients is mediated by the opportunities variables. The impact of opportunities is indicated to be partly mediated by abilities. The impact of both autonomy and participation disappears, leaving a direct impact for the opportunities variable non-material prerequisites. Both abilities and motivation (RAI) have a direct impact on attention for clients. The impact of RAI is minimal compared to the impact of abilities.

In respect to the sub dimension respect for clients, the analysis indicates a mediated effect for the people management variables when adding the opportunity variables, except for HR practices focused at development[4]. This people management variable remains to have a small but significant impact throughout all the models. The opportunities variables have both a direct and mediated effect. The impact of autonomy and co-worker support is suggested to be mediated, whereas participation has a small direct effect. The abilities variable has a direct effect, and the motivation variables (PSM and RAI) also both have a direct effect. The impact of RAI is again small, compared to both abilities and PSM.

With respect to the sub dimension individual approach, the analysis indicates a mediation affect for the people management variables by opportunities, with a small direct effect for HR development. The test again suggests a partly mediated effect for opportunities. Participation and material prerequisites are suggested to be mediated, whereas autonomy and non-material prerequisites have a direct effect. The effect of abilities is direct and so is the effect of the motivation variable PSM. The impact of abilities, PSM and autonomy (opportunities) is most substantial.

[4] In respect to the significant negative impact of personal development (people management variable), based on the correlation matrix (appendix 1) this result is seen as a suppression effect and is therefore not considered a relevant outcome

TABLE 3a multilevel regeression Attention

	Attention															
	0 model		Step 1			Step 2			Med Sig	Step 3			Med Sig	Step 4			Med Sig
	ß (SE)		ß	(SE)		ß	(SE)		t distr.	ß	(SE)		t distr.	ß	(SE)		t distr.
Gender			0,126	0,129		0,120	0,147			0,137	0,117			0,127	0,099		
Education			0,019	0,012		0,017	0,015			0,012	0,013			0,010	0,014		
ServiceYears			0,002	0,003		0,002	0,003			0,003	0,002			0,004	0,002		
Age			0,001	0,002		0,001	0,002			0,000	0,002			0,000	0,002		
HR development			0,082	0,037	*	0,041	0,035		0,040	0,051	0,037			0,049	0,038		
HR current			0,053	0,042		0,008	0,038			-0,007	0,042			-0,018	0,049		
HR tailor Fit			-0,010	0,051		0,012	0,040			0,007	0,042			0,017	0,044		
Support daily functioning			0,209	0,047	***	0,054	0,051		0,109	0,063	0,045			0,053	0,040		
Support personal development			-0,039	0,041		-0,051	0,032			-0,046	0,034			-0,047	0,043		
Autonomy						0,170	0,051	***		0,083	0,049		0,060	0,059	0,054		
Participation						0,095	0,043	*		0,036	0,049		0,045	0,035	0,042		
CoWS						0,064	0,050			0,011	0,045			-0,007	0,045		
Material Prerequistes						0,044	0,037			0,012	0,036			0,008	0,037		
Non-Material Prerequistes						0,116	0,029	***		0,092	0,028	***	0,030	0,093	0,027	***	
Abilities										0,434	0,058	***		0,393	0,052	***	0,026
PSM														0,039	0,038		
RAI														0,024	0,010	*	
constant	4,372	0,021 ***	2,841	0,326	***	1,771	0,359	***		1,043	0,346	**		1,089	0,259	***	
ICC	0,260																
(variance 2th level) τ 2	0,166	0,019	0,131	0,018		0,090	0,015			0,061	0,011			0,054	0,016		
(variance 1st level) σ 2	0,472	0,016	0,443	0,017		0,418	0,016			0,396	0,016			0,391	0,017		
LL (df)	-298,972	3	-267,925	12		-237,944	17			-211,869	18			-205,507	20		
Deviance test: LL change (df change) p=			31,048	9	.00***	29,981	5	.00***		26,075	1	.00***		6,362	2	.021*	
R^2_1 / R^2_2			0,062	/	0,210	0,115	/	0,458		0,161	/	0,630		0,172	/	0,671	
MSE						0,180				0,162				0,159			

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

TABLE 3b multilevel regeression Respect

	Respect														
	0 model		Step 1		Step 2		Med Sig	Step 3		Med Sig	Step 4		Med Sig
	ß (SE)		ß	(SE)	ß	(SE)	t distr.	ß	(SE)	t distr.	ß	(SE)	t distr.
Gender			0,041	0,123	0,048	0,124		0,058	0,095		0,033	0,089	
Education			-0,004	0,012	-0,013	0,014		-0,020	0,012		-0,019	0,013	
ServiceYears			-0,007	0,003 *	-0,008	0,003 **		-0,006	0,002 **		-0,005	0,003	
Age			0,003	0,002	0,003	0,002		0,001	0,002		0,002	0,002	
HR development			0,133	0,032 ***	0,064	0,036	0,070	0,075	0,030 *		0,064	0,032 *	0,012
HR current			0,032	0,032	-0,004	0,028		-0,023	0,034		-0,032	0,031	
HR tailor Fit			0,035	0,041	0,048	0,040		0,043	0,038		0,050	0,045	
Support daily functioning			0,176	0,041 ***	0,001	0,048	0,135	0,006	0,046		-0,006	0,040	
Support personal development			-0,113	0,041 **	-0,119	0,032 ***	0,005	-0,113	0,030 ***		-0,109	0,033 ***	
Autonomy					0,187	0,052 ***		0,103	0,049 *	0,058	0,085	0,044	0,013
Participation					0,151	0,040 ***		0,093	0,039 *	0,050	0,082	0,034 *	0,011
CoWS					0,106	0,040 **		0,051	0,039	0,048	0,038	0,029	
Material Prerequistes					0,038	0,034		0,007	0,034		-0,001	0,032	
Non-Material Prerequistes					0,020	0,028		-0,002	0,026		0,000	0,024	
Abilities								0,423	0,057 ***		0,368	0,048 ***	0,036
PSM											0,119	0,034 ***	
RAI											0,015	0,007 *	
constant	4,365	0,021 ***	3,176	0,304 ***	2,182	0,310 ***		1,525	0,253 ***		1,420	0,301 ***	
ICC	0,251												
(variance 2th level) τ 2	0,151	0,016	0,147	0,020	0,132	0,026		0,087	0,010		0,079	0,012	
(variance 1st level) σ 2	0,449	0,016	0,410	0,016	0,376	0,016		0,358	0,015		0,350	0,015	
LL (df)	-277,160	3	-240,150	12	-203,660	17		-175,102	18		-164,113	20	
Deviance test: LL change (df change) p=			37,010	9 .00***	36,490	5 .00***		28,558	1 .00***		10,989	2 .002**	
R^2_1 / R^2_2			0,088	/ 0,023	0,162	/ 0,126		0,203	/ 0,421		0,221	/ 0,477	
MSE					0,144			0,130			0,124		

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

TABLE 3c multilevel regeression Individualistic approach

	Individualistic approach															
	0 model		Step 1			Step 2			Med Sig	Step 3			Med Sig	Step 4			Med Sig
	ß (SE)		ß	(SE)		ß	(SE)		t distr.	ß	(SE)		t distr.	ß	(SE)		t distr.
Gender			-0,014	0,132		-0,050	0,106			-0,041	0,137			-0,065	0,121		
Education			-0,003	0,012		-0,009	0,015			-0,015	0,011			-0,012	0,011		
ServiceYears			-0,002	0,002		-0,002	0,003			-0,001	0,003			0,000	0,003		
Age			0,002	0,003		0,002	0,002			0,000	0,002			0,000	0,002		
HR development			0,131	0,050	**	0,065	0,043		0,048	0,077	0,043			0,060	0,030	*	0,015
HR current			0,017	0,045		-0,034	0,041			-0,050	0,051			-0,052	0,040		
HR tailor Fit			0,042	0,053		0,070	0,042			0,065	0,044			0,062	0,047		
Support daily functioning			0,155	0,054	**	-0,036	0,056		0,120	-0,024	0,046			-0,033	0,055		
Support personal development			-0,045	0,043		-0,055	0,035			-0,049	0,038			-0,040	0,035		
Autonomy						0,224	0,051	***		0,127	0,050	*	0,067	0,124	0,042	**	0,002
Participation						0,115	0,051	*		0,046	0,047		0,049	0,030	0,039		
CoWS						0,047	0,051			-0,012	0,042			-0,006	0,050		
Material Prerequistes						0,113	0,038	**		0,078	0,030	**	0,036	0,071	0,040		0,007
Non-Material Prerequistes						0,099	0,027	***		0,073	0,023	**	0,036	0,073	0,028	**	
Abilities										0,477	0,069	***		0,431	0,060	***	0,025
PSM														0,143	0,040	***	
RAI														-0,002	0,009		
constant	4,232	0,030	***	3,081	0,401	***	1,850	0,346	***	1,065	0,313	**		0,853	0,343	*	
ICC	0,226																
(variance 2th level) τ 2	0,148	0,019		0,111	0,021		0,074	0,012		0,049	0,010			0,065	0,014		
(variance 1st level) σ 2	0,504	0,018		0,477	0,019		0,439	0,016		0,412	0,018			0,403	0,016		
LL (df)	-322,811	3		-295,484	12		-256,433	17		-227,156	18			-219,964	20		
Deviance test: LL change (df change) p=				27,326	9	.00***	39,051	5	.00***	29,277	1	.00***		7,192	2	0,014	*
R^2_1 / R^2_2				0,054	/	0,244	0,129	/	0,501	0,183	/	0,669		0,201	/	0,556	
MSE							0,198			0,176				0,169			

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

Results of OCB

The results of OCB are discussed in two stages. Firstly OCBO, secondly OCBI.

In the analysis with OCBO as dependent variable, the people management variables show both direct and mediated effects. A small direct effect for HR practices current and a mediated effect by opportunities for support in daily functioning. Also the opportunity variables show both a direct effect, from the co-worker support variable, and a mediated effect for autonomy, participation and material prerequisites. The ability variable has both a mediating effect for the opportunities variables, as well as an additional effect. The motivation variables have no effect as shown by the deviance test.

In respect to OCBI, the people management variables both have a direct and mediated effect. The small direct effect is from the HR tailor fit variable. The mediated effect is from support in daily functioning, mediated by the opportunity variables. The opportunity variables autonomy and co-worker support also have an additional effect. Both the ability variable and motivation variable PSM have a direct additional effect, but no mediation effect. The impact of co-worker support and ability is the most substantial.

TABLE 3d multilevel OCBO

	OCBO															
	0 model		Step 1			Step 2			Med Sig	Step 3			Med Sig	Step 4			Med Sig
	ß (SE)		ß	(SE)		ß	(SE)		t distr.	ß	(SE)		t distr.	ß	(SE)		t distr.
Gender			-0,175	0,137		-0,176	0,123			-0,178	0,124			-0,190	0,125		
Education			-0,007	0,014		-0,016	0,012			-0,021	0,010	*		-0,020	0,010	*	
ServiceYears			0,003	0,003		0,002	0,002			0,003	0,002			0,003	0,002		
Age			0,003	0,002		0,003	0,002			0,002	0,002			0,002	0,002		
HR development			0,014	0,040		-0,072	0,038			-0,064	0,034			-0,067	0,033	*	
HR current			0,133	0,049	**	0,093	0,034	**	0,033	0,080	0,035	*	0,013	0,078	0,037	*	0,002
HR tailor Fit			0,022	0,050		0,013	0,034			0,011	0,042			0,013	0,042		
Support daily functioning			0,153	0,048	***	-0,042	0,046		0,143	-0,038	0,042			-0,041	0,039		
Support personal development			0,044	0,034		0,049	0,032			0,055	0,032			0,056	0,031		
Autonomy						0,141	0,045	**		0,074	0,049		0,049	0,071	0,047		
Participation						0,117	0,031	***		0,072	0,043		0,042	0,069	0,035		
CoWS						0,267	0,041	***		0,225	0,044	***	0,033	0,221	0,033	***	0,004
Material Prerequistes						0,080	0,032	*		0,058	0,034		0,022	0,057	0,030		
Non-Material Prerequistes						0,014	0,026			-0,005	0,022			-0,004	0,022		
Abilities										0,325	0,055	***		0,311	0,061	***	0,008
PSM														0,036	0,033		
RAI														0,003	0,005		
constant	4,033	0,027 ***	2,875	0,315	***	1,614	0,344	***		1,105	0,334	**		1,071	0,348	**	
ICC	0,211																
(variance 2th level) τ 2	0,126	0,024	0,111	0,017		0,059	0,015			0,074	0,014			0,084	0,013		
(variance 1st level) σ 2	0,471	0,019	0,426	0,016		0,379	0,018			0,361	0,018			0,359	0,016		
LL (df)	-292,517	3	-249,058	12		-194,025	17			-176,373	18			-175,645	20		
Deviance test: LL change (df change) p=			43,460	9	.00***	55,033	5	.00***		17,652	1	.00***		0,728	2	0,347	
R^2_1 / R^2_2			0,097	/	0,117	0,195	/	0,529		0,233	/	0,415		0,238	/	0,336	
MSE						0,145				0,132				0,131			

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

TABLE 3e multilevel regeression OCBI

	OCBI															
	0 model		Step 1			Step 2			Med Sig	Step 3			Med Sig	Step 4			Med Sig
	ß (SE)		ß	(SE)		ß	(SE)		t distr.	ß	(SE)		t distr.	ß	(SE)		t distr.
Gender			-0,188	0,125		-0,185	0,137			-0,177	0,144			-0,194	0,141		
Education			-0,007	0,013		-0,015	0,012			-0,019	0,012			-0,019	0,013		
ServiceYears			0,002	0,003		0,000	0,002			0,001	0,002			0,002	0,002		
Age			0,002	0,002		0,002	0,002			0,001	0,002			0,001	0,002		
HR development			0,074	0,047		-0,027	0,033			-0,021	0,036			-0,027	0,037		
HR current			0,048	0,049		0,004	0,037			-0,007	0,033			-0,014	0,035		
HR tailor Fit			0,069	0,041		0,051	0,036			0,048	0,030			0,056	0,027	*	
Support daily functioning			0,193	0,054	***	-0,023	0,038		0,159	-0,019	0,039			-0,030	0,041		
Support personal development			0,011	0,041		0,025	0,029			0,030	0,029			0,031	0,028		
Autonomy						0,166	0,050	***		0,111	0,045	*	0,040	0,093	0,036	**	0,015
Participation						0,060	0,045			0,023	0,049			0,017	0,038		
CoWS						0,449	0,043	***		0,417	0,048	***	0,024	0,403	0,040	***	0,011
Material Prerequistes						0,038	0,031			0,019	0,022			0,014	0,026		
Non-Material Prerequistes						-0,003	0,025			-0,018	0,022			-0,016	0,022		
Abilities										0,267	0,050	***		0,224	0,056	***	0,028
PSM														0,076	0,037	*	
RAI														0,017	0,009		
constant	4,294	0,024 ***	3,092	0,325	***	1,590	0,286	***		1,156	0,433	**		1,112	0,270	***	
ICC	0,279																
(variance 2th level) τ 2	0,190	0,022	0,175	0,019		0,104	0,017			0,100	0,019			0,108	0,018		
(variance 1st level) σ 2	0,490	0,019	0,435	0,016		0,352	0,016			0,342	0,016			0,334	0,020		
LL (df)	-317,270	3	-268,684	12		-172,081	17			-158,989	18			-151,529	20		
Deviance test: LL change (df change) p=			48,586	9	.00***	96,604	5	.00***		13,092	1	.00***		7,459	2	0,012	*
R^2_1 / R^2_2			0,111	/	0,075	0,280	/	0,451		0,302	/	0,474		0,318	/	0,433	
MSE						0,127				0,120				0,115			

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
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Results of employee well-being

Employee well-being is discussed in three stages. Firstly jobs atisfaction, secondly psychological well-being and thirdly physical well-being.

In respect to job satisfaction, the people management variables show both direct and mediated effects. The variable HR practices current is suggested to have a mediated effect by opportunities. Support in daily functioning has a direct effect. The opportunity variables autonomy, material prerequisites and non-material prerequisites have a direct effect on job satisfaction. The abilities variable does not have an effect, not mediating nor additional. The motivation variables RAI have an additional direct effect. The most substantial effects are from support in daily functioning (PM), autonomy (O) and non-material prerequisites (O).

In the analysis with psychological well-being as dependent variable, the people management variable support in daily functioning is indicated to have a mediated effect by opportunities. HR practices current has a direct effect[5]. The opportunities variable non-material prerequisites has a direct effect. The abilities variable does not have any effect, not mediating nor additional. The motivation variable RAI has a small additional effect, but no mediating effect.

In respect to physical well-being, the model shows that the people management variable support in daily functioning has a mediated effect by the opportunity variables. However, adding the people management variables or the opportunity variables does not result into a significant model fit change. The only variable that has a direct effect is the opportunities variable autonomy. Adding the ability and motivation variables does result in a significant change in model fit, however none of these variables have a significant effect. The explained variance is very low (R^2_1 . 044 R^2_2 .277).

[5] The negative effect of people management variable HR practices development is considered a suppression effect based on the correlation matrix (appendix 1).

TABLE 3f multilevel regeression Job satisfaction

	Job satisfaction															
	0 model		Step 1		Step 2		Med Sig	Step 3		Med Sig	Step 4		Med Sig
	ß	(SE)	ß	(SE)	ß	(SE)	t distr.	ß	(SE)	t distr.	ß	(SE)	t distr.
Gender			0,032	0,206	-0,036	0,177		-0,036	0,209		-0,041	0,161	
Education			0,016	0,013	0,012	0,012		0,011	0,016		0,004	0,014	
ServiceYears			-0,003	0,003	-0,004	0,003		-0,004	0,003		-0,004	0,003	
Age			0,002	0,002	0,003	0,002		0,003	0,002		0,004	0,002	
HR development			0,071	0,052	-0,015	0,046		-0,014	0,037		-0,002	0,046	
HR current			0,146	0,049 **	0,105	0,039 **	0,025	0,103	0,052 *	0,001	0,081	0,042	0,016
HR tailor Fit			-0,084	0,040 *	-0,040	0,048		-0,041	0,039		-0,019	0,043	
Support daily functioning			0,337	0,044 ***	0,174	0,050 ***	0,119	0,176	0,057 **		0,162	0,053 **	0,009
Support personal development			0,011	0,041	0,016	0,036		0,017	0,039		0,008	0,037	
Autonomy					0,398	0,058 ***		0,385	0,063 ***	0,008	0,336	0,058 ***	0,028
Participation					-0,100	0,055		-0,111	0,054 *		-0,098	0,054	
CoWS					0,069	0,054		0,062	0,044		0,024	0,053	
Material Prerequistes					0,092	0,044 *		0,088	0,038 *	0,004	0,087	0,041 *	0,000
Non-Material Prerequistes					0,105	0,029 ***		0,101	0,031 ***	0,205	0,102	0,036 **	
Abilities								0,066	0,076		0,021	0,097	
PSM											-0,042	0,047	
RAI											0,049	0,010 ***	
constant	4,323	-0,036 ***	2,295	-0,528 ***	1,069	0,469 **		0,964	0,603		1,262	0,480 **	
ICC	0,170												
(variance 2th level) τ 2	0,121	-0,020	0,054	-0,010	e			e			0,007	0,027	
(variance 1st level) σ 2	0,592	-0,026	0,526	-0,022	0,476	0,019		0,475	0,024		0,458	0,020	
LL (df)	-384,669	3	-329,294	12	-284,852	17		-284,395	18		-270,493	20	
Deviance test: LL change (df change) p=			55,375	9 .00***	44,442	5 .00***		0,457	1 0,245		13,902	2 .001**	
R^2_1 / R^2_2			0,111	/ 0,554	0,196	/ e		0,197	/ e		0,226	/ 0,946	
MSE					0,225			0,226			0,210		

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

TABLE 3g multilevel regeression Psychological Wellbeing

	Psychological Wellbeing														
	0 model		Step 1		Step 2		Med Sig	Step 3		Med Sig	Step 4		Med Sig		
	ß (SE)		ß	(SE)	ß	(SE)	t distr.	ß	(SE)	t distr.	ß	(SE)	t distr.		
Gender			0,175	0,189	0,109	0,172		0,109	0,168		0,103	0,133			
Education			0,035	0,019	0,044	0,018 *		0,044	0,019 *		0,034	0,020			
ServiceYears			-0,005	0,005	-0,003	0,005		-0,003	0,005		-0,003	0,004			
Age			-0,002	0,003	-0,001	0,003		-0,001	0,003		0,001	0,003			
HR development			-0,118	0,064	-0,133	0,057 *	0,009	-0,133	0,062 *		-0,120	0,048 *			
HR current			0,281	0,067 ***	0,206	0,056 ***	0,042	0,205	0,067 **	0,000	0,178	0,065 **	0,014		
HR tailor Fit			-0,132	0,076	-0,099	0,059		-0,099	0,065		-0,070	0,066			
Support daily functioning			0,271	0,069 ***	0,117	0,073	0,075	0,117	0,059 *		0,099	0,076	0,009		
Support personal development			0,027	0,062	0,017	0,060		0,017	0,055		0,007	0,046			
Autonomy					0,175	0,076 *		0,174	0,092	0,000	0,113	0,083	0,024		
Participation					-0,005	0,062		-0,006	0,070		0,008	0,067			
CoWS					0,109	0,057		0,108	0,067		0,060	0,055			
Material Prerequistes					0,035	0,057		0,035	0,050		0,033	0,052			
Non-Material Prerequistes					0,252	0,051 ***		0,252	0,043 ***	0,000	0,253	0,056 ***			
Abilities								0,005	0,107		-0,052	0,080			
PSM											-0,049	0,079			
RAI											0,061	0,014 ***			
constant	3,998	0,031 ***	2,368	0,486 ***	1,080	0,540 *		1,072	0,608		1,444	0,497 **			
ICC	0,180														
(variance 2th level) τ 2	0,160	0,022	0,100	0,019	e			e			e				
(variance 1st level) σ 2	0,731	0,024	0,694	0,027	0,658	0,027		0,658	0,027		0,640	0,027			
LL (df)	-473,890	3	-447,717	12	-421,125	17		-421,123	18		-409,690	20			
Deviance test: LL change (df change) p=			26,172	9 .001***	26,593	5 .00***		0,001	1 0,487		11,433	2 .002**			
R^2_1 / R^2_2			0,050	/ 0,377	0,100	/ e		0,100	/ e		0,124	/ e			
MSE					0,457			0,457			0,429				

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

TABLE 3h multilevel regeression Physical Wellbeing

	Physical Wellbeing													
	0 model		Step 1 (PM)		Step 2 (O)		Med Sig	Step 3 (A)		Med Sig	Step 4 (M)		Med Sig	
	ß (SE)		ß	(SE)	ß	(SE)	t distr.		(SE)	t distr.	ß	(SE)	t distr.	
Gender			0,203	0,340	0,163	0,364		0,158	0,315		0,183	0,328		
Education			0,018	0,036	0,018	0,044		0,021	0,038		0,014	0,034		
ServiceYears			-0,013	0,007 *	-0,013	0,006 *		-0,014	0,005 *		-0,014	0,008		
Age			-0,006	0,005	-0,005	0,005		-0,004	0,007		-0,004	0,005		
HR development			-0,049	0,108	-0,094	0,089		-0,099	0,102		-0,076	0,093		
HR current			0,137	0,105	0,100	0,109		0,108	0,109		0,094	0,099		
HR tailor Fit			-0,040	0,121	-0,010	0,114		-0,007	0,114		0,008	0,138		
Support daily functioning			0,337	0,119 **	0,215	0,138	0,033	0,212	0,111		0,208	0,125		
Support personal development			-0,174	0,101	-0,175	0,098		-0,179	0,101		-0,190	0,120		
Autonomy					0,247	0,122 *		0,291	0,123 *		0,260	0,130 *		0,008
Participation					-0,048	0,102		-0,018	0,105		0,002	0,102		
CoWS					0,064	0,089		0,088	0,093		0,063	0,111		
Material Prerequistes					0,043	0,107		0,057	0,096		0,066	0,082		
Non-Material Prerequistes					0,120	0,061 *		0,132	0,073		0,131	0,072		
Abilities								-0,207	0,179		-0,192	0,127		
PSM											-0,163	0,107		
RAI											0,034	0,021		
constant	3,562	0,054 ***	2,530	0,925 **	1,559	0,940 **		1,896	0,791 *		2,284	0,735 **		
ICC	0,198													
(variance 2th level) τ 2	0,269	0,042	0,238	0,042	0,211	0,039		0,213	0,040		0,194	0,030		
(variance 1st level) σ 2	1,087	0,043	1,055	0,046	1,045	0,041		1,043	0,048		1,040	0,048		
LL (df)	-642,915	3	-628,620	12	-623,417	17		-622,512	18		-620,286	20		
Deviance test: LL change (df change) p=			14,295	9 0,061	5,204	5 0,208		0,904	1 0,013 *		2,226	2 0,041 *		
R^2_1 / R^2_2			0,030	/ 0,114	0,039	/ 0,214		0,041	/ 0,208		0,044	/ 0,277		
MSE					1,131			1,128			1,129			

Correlation is significant at level <0,05*
Correlation is significant at level <0,01**
Correlation is significant at level <0,001***

N groups (mean group N) 63 (6,7)
N 421

DISCUSSION

Although the complexity at the variable level/sub dimension level is highly interesting, the discussion of the results is limited to the theory and dimension level, since the research considers the relationship between theories and different aspects of theories.

The results of these analyses have several implications for the theoretical framework that we started from. Focusing on the relationship between HRM, in this case people management, and both task behavior and OCB, the assumed relationship is present (Hypotheses 1a, 2a). In the majority of cases the effect of people management on the behavior variables was partly mediated by the opportunity variables. These mediation paths were not found to be significant. However they do create an outline for further research. The results show a similar picture when focusing on the relationship between people management and employee well-being (Hypothesis 3a). The results give an indication that indeed the AMO theory can be used to fill in the 'black-box' as Knies (2012) did before. In respect to the people management measurement, the measurement scale as suggested by Knies (2012) is not stable in this research. Not only does the HR practices dimension consist out of two separate dimensions in this research, but there also is a high correlation between several of the dimensions. These correlations actually cause difficulties when performing the regression tests. These outcomes could be related to the current sector with low education jobs compared to the research of Knies (2012)or to differences in HRM systems between the researched organizations. It would be interesting to see how the measurement instrument behaves in different contexts and to investigate the possibility to create a people management measurement that is not sensitive to contextual differences.

With respect to the AMO theory, the results are not quite so similar to earlier findings as the results on people management. Knies (2012) found opportunities to be mediated by motivation whereas this research finds indications that opportunity is (partly) mediated by ability instead of motivation (Hypotheses 1b, 2b, 3b). These results could be caused by the following

main differences in the measurement of the concepts. Firstly, the current research uses the RAI index of the self determination theory and a public service motivation proxy as motivation measurements, whereas Knies (2012) used commitment. Secondly, this research involves several sub dimensions of opportunities, whereas Knies used the autonomy scale. Based on the research of Onwezen (2011) and Bijsterveld (2011), the new opportunity dimensions were included. However, one could debate whether or not these sub dimensions are opportunities. As we have defined opportunities as all that the employees need to perform, it should be included. However when going back to Appelbaum (2000) the focus is on the participation in decisions on organizational routines. When focusing on opportunities from this perspective, only the sub dimension autonomy and participation can be seen as dimensions of opportunities. The AMO theory has become one of the most popular theories in HRM (Boselie et al. 2005). However, we have just started to use the theory to actually explore the black-box. Do we wish to take this research a step further and create comparable research, then there is a need to define what these dimensions of the AMO theory actually entail. When we are measuring different concepts, it is no surprise that the results will be different.

An interesting result looking at PSM is that PSM has a significant effect on two out of three task behavior aspects. As discussed in the theoretical framework, PSM was expected to relate strongly to the context of the sector. The results show that indeed the PSM proxy is strongly connected to the context based task behavior. The interpretation of these results is limited due to the fact that in the survey there was only room for a two item PSM proxy. However, these results should be reason enough to further investigate the relationship between PSM and context based task behavior in social sectors.

When focusing on the employee well-being multiple results stand out. Firstly, how little can we say about the physical well-being of employees. Whereas both job satisfaction and psychological well-being show several effects with the included independent variables, the

outcome of the physical well-being analysis is unsatisfying. These results show that in order to really grasp the antecedents for physical well-being further research is necessary. Secondly, it is striking that none of the well-being measurements is affected by the abilities variable. It seems that behavior is related to abilities but that the well-being is not. Finally, for the measurement of employee well-being, many have used the single item of job satisfaction or other single dimension measurements (Voorde 2011). However, the results of the factor analysis show that employee well-being is definitely not a single order construct. The dimensions of satisfaction, psychological and physical well-being are related to each other, but are not the same. Therefore when focusing on employee well-being, a distinction should be made between types of well-being.

As we have introduced the employee well-being aspects as part of the balanced theory, the results should also be seen in this perspective. The concepts of behavior, both task and OCB, and employee well-being were not connected in this research as dependent or independent variables. They were all treated as dependent variables, in the first place because of the balanced approach of the research, in the second place to investigate in communalities, differences and perhaps contradictions in antecedents. In respect to the antecedent of behavior and both the happiness dimensions of employee well-being (job satisfaction and psychological well-being), the current research finds support from the mutual gains approach similar to the conclusions of Van de Voorde (2011) (hypothesis 4a). Although differences are present, such as the non effect of abilities on well-being whereas it has a large effect on behavior, the direction of the effects that are present are similar. Therefore there is no suggestion of conflicting outcomes. The results for the physical well-being dimension in comparison to behavior are similar. Van de Voorde (2011) indicates that conflicting outcomes can be present in this relationship. However these are not found within the current research (hypothesis 4b).

CONCLUSION

The results of this research indicate that there is no reason for organizations not to pursue a balance between employee outcomes and organizational outcomes. Although both outcomes have different antecedents there are no conflicting antecedents and many mutual gains. In the organizational outcomes, behavior, both people management and AMO, have an influence. In respect to employee outcomes, well-being, people management, opportunities and motivation have an influence.

Although this research reduces the outcomes to the dimension levels, such as people management, opportunities and motivation, the complexity within the different dimensions of the model should not be underestimated. With each dimension having one or more sub dimensions the interplay between the sub dimensions of the different dimensions of the model is too complex to grasp within one article. This research was set out to create a holistic view on the interplay between several theories within and surrounding the black-box of the HRM-performance chain. When focusing on managing the balance between both organizational outcomes and employee outcomes, we can see that relatively the same mechanisms work positive for both outcomes. Although more research should be done at the sub dimension level, this research does not show contradicting mechanisms.

The results of this study should be seen within the limitations of the study. Firstly, the study was a cross-sectional study. This means that there was no possibility for testing causal effects. By creating a longitudinal dataset on the subject, these tests can hopefully be performed in the future. Secondly, unfortunately none of the mediation effects was significant. This could be caused by the statistical power of the research with only a sample of 421 completely filled in surveys. However, it could also be due to the bootstrapping technique that was used with the multilevel analysis. Using the bootstrap method often has an increasing effect on the coefficient error (Lockwood & MacKinnon, without date), therefore having a negative effect on the

mediation testing.

To conclude a note for researchers and practitioners. Practitioners should bear in mind the impact of the perception of support in daily functioning by the team manager. It has an effect on all the forms of task behavior, OCB and employee well-being, and therefore it has a large effect on both organizational outcomes and employee outcomes. As for research suggestions, this research has many limitations that could be overcome in further research. The choice to focus on the abstraction level of the relationship between the theories has left the complexity on the individual variable and sub dimension level unexplored. However, in light of all the measurement issues that have been discussed, there is also still work to be done at the theoretical level before we can claim to actually understand the relationships within the black-box, connecting HRM and performance.[6]

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REFERENCES

Visie stuurgroep VV&T (2011) Kwaliteitskader verantwoorde zorg.

Appelbaum, E., Bailey, T., Berg, P. and Kalleberg, A. (2000) *Manufacturing advantage: why high-performance work systems pay off*. Ithaca: Cornell University Press

Arthur, J. B. (1994) Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal* 37, 670-687.

Bagozzi, R.P., Yi, Y., and Phillips, L.W. (1991) "Assessing Construct Validity In Organizational Research," *Administrative Science Quarterly* 36(3), 421-458.

Barney, J.B. (2001) "Is the resource-based 'view' a useful perspective for strategic management research? Yes," *Academy of Management Review*, 26(1), 41-56.

BARNEY, J (1991) Firm Resources and Sustained Competitive Advantage, *Journal of Management* 17, 99-120

Baron, R.M. and Kenny, D.A. (1986) 'The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations', *Journal of Personality and Social Psychology* 51(6), 1173–1182.

Behn (2003) Why Measure Performance? Different Purposes Require Different Measures, Public Administration 63 (5), 586-606

Bijsteren, van (2011) Een onderzoek naar kwaliteit van zorg binnen intramurale zorginstellingen van BrabantZorg, Universiteit Utrecht Master scriptie

Blau, P (1964) *Exchange and Power*. New York: John Wiley and Sons.

Boselie, Dietz & Boon (2005) Commonalities and contradictions in HRM and performance research, *Human Resource Management Journal*, (15) 3, 67-94

Boselie, P. (2010) *Strategic human resource management: a balanced approach*, London: McGraw-Hill.

Boswell,W. R., Boudreau, J.W.,& Dunford, B. B. (2004) The outcomes and correlates of job search objectives: Searching to leave or searching for leverage? *Journal of Applied Psychology*, 89, 1083-1091.

Brewer, Boyne & Walker (2010) *Public Management and Performance: Research Directions*. Cambridge, England: Cambridge University Press.

Cole, M. S., Schaninger, B., & Harris, S. G. (2002) The workplace social exchange network: A multi-level, conceptual examination. *Group and Organization Management*, *27*, 142-167.

De Winne & Sels (2003) *HRM and Performance, Research without theory a literature review*, Research report 0333, Katholieke Universiteit Leuven.

Deci, E. L.,& Ryan, R. M. (2000) The 'what' and 'why' of goal pursuits: human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268.

Deephouse (1999) To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal* 20(2): 147–166.

Delery, J. E., & Shaw, J. D. (2001) The Strategic Management of People in Work Organizations: Review. *Research in personnel and human resources management : review, synthesis and extension*.

Gagné, M., & Deci, E.L. (2005) Self-determination theory and work Motivation. *journal of organizational behavior*. 26, 331-362.

Grant, A.M., Christianson, M.K. and Price, R.H. (2007) Happiness, health, or relationships? Managerial practices and employee wellbeing tradeoffs. *Academy of Management Perspectives*, 21, pp. 51–63.

Guest (1997) 'Human resource management and performance: a review and research agenda', *International Journal of Human Resource Management*, 8 (3), 263-276.

Hood (1991) A public Management for all seasons, *Public Administration* (69), 3-19

Hox, J. (2002) *Multilevel Analysis*, Lawrence Erlbaum Associates, Inc., Publishers

Huselid, M. (1995) The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38, 635-672.

Knies (2012) *Meer waarde voor en door medewerkers, een longitudinal studie naar de antecedenten en effecten van People management*, universiteit Utrecht

Kolenikov (without date) Confirmatory factor analysis using cfa, *Stata journal*

Lee & Allen (2002) Organizational Citizenship Behavior and Workplace Deviance: The Role of Affect and Cognitions, *Journal of Applied Psychology*, 87 (1), 131–142

Lockwood & MacKinnon (without date), Bootstrapping the Standard Error of the Mediated Effect

MacKinnon DP, Lockwood CM, Hoffman JM, West SG, Sheets V. A (2002) Comparison of methods to test mediation and other intervening variable effects. *Psychological Methods* 7, 83–103

Nishi and Wright (2007) Strategic HRM and Organizational Behavior: Integrating Multiple Levels of Analysis, *CAHRS Working Paper Series*

Onwezen (2011) Aandacht voor individuen, een onderzoek naar de kwaliteit van zorg binnen intramurale zorginstellingen van BrabantZorg, Universiteit Utrecht master scriptie.

Paauwe, J. (2004) *HRM and Performance: Achieving Long-Term Viability,* Oxford: Oxford University Press.

Paauwe, J. (2009) HRM and performance: Achievements, methodological issues and prospects. *Journal of Management Studies*, 46(1), 129-142.

Perry, J. L. & Wise, L. R. (1990) "The Motivational Bases of Public Service." *Public Administration Review* 50, 367-73.

Perry, J.L, Hondeghem A., & Wise, L.R. (2010) Revisiting the Motivational bases of public service: Twenty years of research and an agenda for the future. *Public Administration Review.* 70, 681-690.

Preacher, Kristopher J. and Andrew F. Hayes (2004) "SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models," *Behavior Research Methods, Instruments, and Computers*, 36 (4), 717–31.

Purcell, J. & Hutchinson, S. (2007) 'Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence', *Human Resource Management Journal*, 17 (1), 3-20.

Rainey, H. (2009) *Understanding and managing public organizations. Third edition.* San Francisco: Jossey-Bass

Rainey, H.G., M. Koeler and C. Jung (2008) "Public Values and Public Service Motivation: How Do Public Values Relate to Patterns of Public Service Motivation?" A paper proposed for the workshop Public Values and Public Interest - Normative Questions in the Evaluation and Development of the Public Sector. May 21, 2008.

Ryan, R. M., & Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55, 68 –78.

Spector (2006) Method Variance in Organizational Research: Truth or Urban Legend?, *Organizational Research Methods* 2006; 9; 221

Stark (2002) What is new public management, *Journal of Public Administration Research and Theory* 12, 137-15

Taylor (2008) Organizational Influences, Public Service Motivation and Work Outcomes: An Australian Study', *International Public Management Journal*, 11:1, 67 - 88

Vandenabeele W. (2008) *Towards a public administration theory of Public Service Motivation*, faculteit sociale wetenschappen, K.U. leuven

Vandenabeele, W. (2007) Towards a theory of Public Service Motivation : an institutional approach. *Public management review*. 9 (4): 545-556

Voorde, K. van de, Paauwe, J. and Van Veldhoven, M. (2011) Employee Well-being and the HRM–Organizational Performance Relationship: A Review of Quantitative Studies. *International Journal of Management Reviews.*

Wanous, J.P., Reichers, A.E. & Hudy, M.J. (1997) 'Overall job satisfaction: how good are single-item measures?', *Journal of Applied Psychology*, 82 (2), 247-252.

Wright, P.M. & Nishii, L.H. (2006) Strategic HRM and organizational behavior: integrating multiple levels of analysis, *Working paper 06-05*, Cornell University, Ithaca, NY.

Appendix 1: correlation matrix

Correlations

		1	2	3	4	5	6	7	8	9	10	11	12	12	14	15	16	17	18	19	20	21
1.	HR development	1																				
2.	HR current	,431**	1																			
3.	HR tailor Fit	,408**	,506**	1																		
4.	Support daily fuctioning	,344**	,411**	,681**	1																	
5.	Support personal development	,542**	,289**	,488**	,505**	1																
6.	Autonomy	,409**	,286**	,302**	,466**	,337**	1															
7.	Participation	,333**	,356**	,434**	,582**	,366**	,551**	1														
8.	Coworker support	,326**	,297**	,385**	,440**	,282**	,453**	,395**	1													
9.	Material Pre	,234**	,231**	,260**	,327**	,187**	,232**	,249**	,238**	1												
10.	Non-Material Pre	,001	,183**	,115*	,191**	,077	,117*	,157**	,059	,299**	1											
11.	Abilities	,225**	,279**	,286**	,385**	,210**	,508**	,498**	,401**	,304**	,230**	1										
12.	PSM	,254**	,201**	,220**	,266**	,152**	,272**	,317**	,207**	,212**	,111*	,366**	1									
13.	RAI	,193**	,224**	,167**	,271**	,178**	,385**	,271**	,337**	,177**	,098*	,363**	,346**	1								
14.	Attention	,218**	,237**	,244**	,341**	,169**	,404**	,382**	,289**	,252**	,271**	,540**	,294**	,357**	1							
15.	Respect	,245**	,210**	,255**	,312**	,097*	,423**	,415**	,331**	,216**	,141**	,557**	,410**	,348**	,495**	1						
16.	Individual approach	,254**	,213**	,269**	,311**	,171**	,416**	,379**	,276**	,311**	,259**	,551**	,379**	,252**	,523**	,574**	1					
17.	OBCI	,286**	,260**	,360**	,401**	,281**	,479**	,415**	,670**	,225**	,065	,498**	,308**	,379**	,363**	,463**	,363**	1				
18.	OCBO	,221**	,315**	,310**	,365**	,260**	,431**	,429**	,511**	,267**	,135**	,518**	,248**	,284**	,383**	,366**	,373**	,594**	1			
19.	Psychological WB	,046	,246**	,140**	,254**	,108*	,247**	,215**	,201**	,204**	,359**	,228**	,121*	,336**	,206**	,198**	,173**	,189**	,166**	1		
20.	Physical WB	,018	,116*	,103*	,171**	-,009	,162**	,112*	,121*	,125*	,158**	,081	,015	,153**	,097*	,093	,061	,142**	,057	,296**	1	
21.	Job Satisfaction	,256**	,310**	,295**	,447**	,264**	,512**	,328**	,341**	,312**	,269**	,370**	,209**	,427**	,350**	,313**	,327**	,378**	,381**	,424**	,159**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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Appendix 2: Partial correlation matrix

Control Variables		Partial Correlations												
		1	2	3	4	5	6	7	8	9	10	11	12	13
gender & education & ServiceYears & Age	1. HR development	1,000												
	2. HR current	,426**	1,000											
	3. HR tailor Fit	,408**	,498**	1,000										
	4. Support daily fuctioning	,374**	,418**	,692**	1,000									
	5. Support personal development	,531**	,275**	,493**	,522**	1,000								
	6. Autonomy	,420**	,293**	,312**	,474**	,343**	1,000							
	7. Participation	,372**	,373**	,445**	,578**	,392**	,549**	1,000						
	8. Coworker support	,322**	,291**	,390**	,443**	,280**	,447**	,394**	1,000					
	9. Material Pre	,241**	,242**	,265**	,339**	,181**	,229**	,250**	,256**	1,000				
	10. Non-Material Pre	,018	,209**	,126*	,197**	,090	,141**	,177**	,097	,277**	1,000			
	11. Abilities	,242**	,288**	,287**	,359**	,209**	,507**	,480**	,389**	,311**	,253**	1,000		
	12. PSM	,274**	,207**	,214**	,247**	,162**	,284**	,321**	,212**	,190**	,068	,387**	1,000	
	13. RAI	,200**	,221**	,170**	,259**	,185**	,385**	,249**	,329**	,174**	,102*	,346**	,352**	1,000

**. Correlation is significant at 0.01 level

*. Correlation is significant at 0.05 level