

## Tilburg University

### About tubs and tents

van Veldhoven, M.J.P.M.

*Publication date:*  
2012

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication in Tilburg University Research Portal](#)

*Citation for published version (APA):*  
van Veldhoven, M. J. P. M. (2012). *About tubs and tents: Work behavior as the foundation of strategic human resource management*. PrismaPrint.

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal


#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

About **tubs** and **tents**: Work behavior as the  
foundation of strategic HRM



Prof.dr. Marc van Veldhoven

A close-up portrait of Marc van Veldhoven, a man with glasses, looking slightly to the right. The image is overlaid with a semi-transparent green filter. The text is placed over the upper and middle portions of the image.

**Marc van Veldhoven** (Sittard, 1963) studied psychology in Tilburg. In 1987 he graduated (cum laude) in clinical and health psychology. He worked for 4 years as a student assistant and research assistant in this department.

From 1988-1997 Marc worked as a psychologist/researcher at the occupational health service of West-Brabant. In 1994 he published -together with Prof. Theo Meijman- the Questionnaire on the Experience and Assessment of Work (Vragenlijst Beleving en Beoordeling van de Arbeid; VBBA), which was developed during a project at the Dutch Institute for Working Conditions (Nederlands Instituut voor Arbeidsomstandigheden; NIA/Amsterdam).

Marc wrote his PhD thesis while he worked in practice. It was titled “Psychosocial workload and job stress” (Groningen, 1996). Prof. Theo Meijman, Prof. Tom Snijders and Prof. Frank van Dijk were the supervisors.

During the period 1997-2002 Marc worked as an independent consultant (Van Veldhoven Consultancy BV). He combined this with projects as a senior researcher at the University of Nijmegen (Department of Work- and Organizational Psychology) and at SKB/Amsterdam.

Since 2002 Marc is employed in the department of HR Studies at Tilburg University. In his research he attempts to build bridges between work psychology and strategic HRM. In 2007 Marc worked as a visiting researcher at King’s College (London) for one semester.

Marc lives in Breda and is married to Carla Schellings. He has three children: Marjolein (20), Jeroen (17) and Hanne (10). They contribute to Marc’s health and well-being, just like music, running and science fiction.

# ABOUT TUBS AND TENTS: WORK BEHAVIOR AS THE FOUNDATION OF STRATEGIC HRM

Inaugural lecture

delivered in a shortened version at the occasion of accepting the appointment as

Professor of Work, Health and Well-being

School of Social and Behavioral Sciences, Tilburg University

20 April 2012 by Prof.dr. Marc van Veldhoven

© Marc van Veldhoven, 2012

ISBN: 978-94-6167-092-2

All rights reserved. This publication is protected by copyright, and permission must be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording or otherwise.

[www.tilburguniversity.edu](http://www.tilburguniversity.edu)

---

# Contents

Introduction	5
Strategic HRM	6
Research on strategic HRM: a lack of foundation	8
The bathtub model	9
Work psychology	11
Research on work behavior: a lack of context	17
Research on the bathtub model	19
<i>a. From strategic HRM to the individual employee</i>	21
<i>b. From individual employee to organizational performance</i>	23
<i>c. The bathtub model as a whole</i>	24
Future research	27
<i>a. The antecedents of job demands and resources</i>	27
<i>b. The role of recovery in the coordination of efforts towards results</i>	28
<i>c. The camping tent model: “life advantage through organizations”</i>	29
Conclusion	31
Word of thanks	32
References	35



## About tubs and tents:

### Work behavior as the foundation of strategic HRM

**Introduction** Dear Rector Magnificus, members of the Board of Governors, dear professors and other members of the university community. Dear family, friends and audience. Ladies and gentlemen. Let's start with a wink of an eye. By giving the people in the front row a wink I can make contact with them without people in the back noticing. By giving them a wink I can communicate that there's more to the situation than some very salient features would lead to expect. I can create an atmosphere of trust, literally in the blink of an eye.

None of these subtle forms of communication applies, however, to the wink produced by Sonny, the main character in the science fiction movie "I Robot". He just imitates what he sees humans are doing, and wonders "What does it mean?". Let's discuss Sonny's wink of an eye in more detail, not because I like this genre which some consider quite dubious, but because this will lead us to the main topic of this public lecture: strategic HRM and the role work behavior plays in this context. After having introduced what strategic HRM and work behavior are about, I shall elaborate on the research which I have performed at the interface of the two. Next, I would like to present my wishes and plans for future research. I shall conclude with a word of thanks.

The movie "I Robot" (2004)<sup>1</sup> is based on the famous story by Isaac Asimov and is set in the year 2035. Humanity is assisted in all of its basic labor by robots. The humanoid robot Sonny is under suspicion of having murdered Dr. Alfred Lanning, leading scientist at U.S. Robotics. During his first interrogation by detective Del Spooner, Sonny learns what an eyewink is (and later in the movie this will prove to be a valuable bit of information for both of them). It is impossible that he has committed the murder, as robots are programmed according to basic laws. The most fundamental of these is that a robot will never harm a human. But if one robot is capable of ignoring this fundamental law of robotics, then just imagine the threat emanating from all robots collectively towards humanity. This is the core theme of the movie.

Please be aware that the original story "I Robot" was written in 1950 and can be considered a classic on the ethical dilemmas, the pros and cons of obedience versus independence

---

<sup>1</sup> See the "internet movie database"-website for more information: [www.imdb.com](http://www.imdb.com).



in workers, whether robot or man. An appropriate topic in relation to the management of people in organizations.

But we can consider the movie version also as the product of dedicated industry. A movie is the end result of the collaborative, coordinated efforts of a large group of people. The end titles mention over 1,000 names and last for more than 5 minutes. And this omits those involved in the production of small bits of the movie in separate special effects studios and those involved in the distribution of the movie to theatres across the globe. A movie is a nice example of a temporary organization with staff numbers equalling those of a small hospital<sup>2</sup>.

**Strategic HRM** The film example illustrates very well how, starting with a literary story, next a film scenario, and at the direction of a very small group of initiators (film director, film studio management, producer) a tangible product is created through the coordinated efforts of a large group of people. Only a handful of these are actors, of which one acted in front of the camera but was subsequently made unrecognizable using animation for the role of Sonny.

As entertaining as the efforts of the actors may be, most of the work on the movie is done behind the scenes. There are a lot of resources that are used to create a movie, like technology, money, and advertising, but in the context of this lecture I am only interested in people. Just like this movie, most organizations are characterized by the fact that under the direction of a small group of initiators and managers a tangible result is aimed for, involving the efforts of a (large) group of people. This leads to the topic of strategic human resource management (strategic HRM).

Strategic HRM concerns all management activities by an organization targeted at achieving organizational goals by means of employees. These targets can be making profit,

---

<sup>2</sup> While we are considering Sonny's wink, let me seize the opportunity to acquire a place in the next volume in the popular book series titled *Freakonomics* (Levitt & Dubner, 2006). These are popular science books coupling an economic-numerical perspective with an interest for everyday issues from parenting to Sumo-wrestling. The production of the "I Robot" movie cost an estimated 120 million dollars. Worldwide sales by the end of 2004 -the year the movie was released- amounted to 350 million dollars. In short: the investment had a triple return on investment even within the year of release. This further implies that most of the income after 2004, like for instance later sales of the movie on DVD or Blu-ray is pure profit.

Sonny's wink lasts a full second, during which short period his eyelid travels the distance of  $2 \times 2 = 4$  cm. When we combine this fact with costs (120 million) and total playing time (115 minutes), we can compute that the wink cost about 20.000 dollars. Counting only the returns during the first year the wink earned 60.000 dollars, so this implies a value of 1.500.000 dollars per stretching meter. There can only be one conclusion: an eyewink is worth pure gold. But you probably knew this already.

providing excellent health care, producing revolutionary technical equipment, providing challenging education, or creating a wonderful and entertaining movie. Whatever the goals, the organization usually wants to compare favorably with competitors in its line of business: it is searching for an organizational competitive advantage. An organization can be large or small, this goal-directedness is usually a defining characteristic. The core objective of strategic HRM is formulated in an excellent way in the title of a classic book in this field by Jeff Pfeffer (1994): “Competitive advantage through people”. This is exactly what strategic HRM is about.

Research in the area of strategic HRM now exists for some 25 years. In this literature many approaches are available which discuss the characteristics employees should have in order to achieve organizational goals and advantage in the best possible way. The most influential model in this area is the so-called AMO-model (Appelbaum et al., 2000), and it is represented in figure 1. In this model it is the right combination of abilities (A), motivation (M) and opportunities (O) of and for employees that is essential to achieve good organizational performance. The linking element between the two is a variable that Appelbaum et al. (2000) call “discretionary effort”.

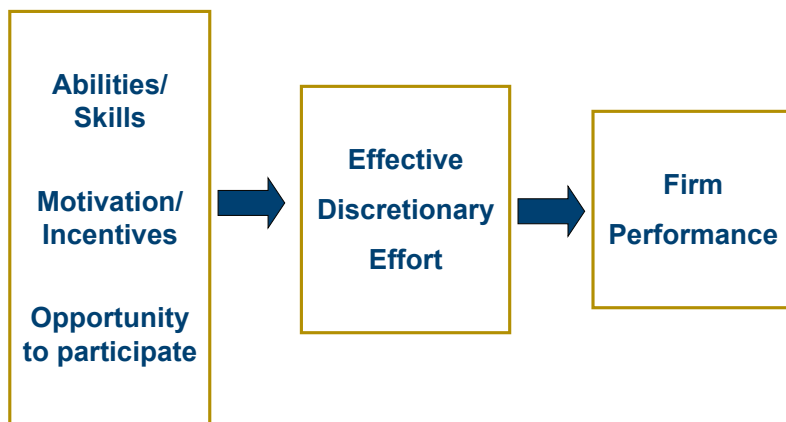


Figure 1: AMO-Model (Appelbaum et al., 2000)

This term implies “choosing as an employee to invest effort in organizational goals”. What I like about the term discretionary effort is the combination of both energy and motivation that it implies. In the core, strategic HRM is about creating the right conditions (including leadership, personnel instruments, and work organization/system) in order to enable the right mix of people (in terms of knowledge, skills and motivation) to choose -again and

again- to deliver an optimal effort towards organizational goals. In brief: *strategic HRM is about the optimization of human effort for organizational goals*. All thinkable tactics are employed here. This ranges from strict control over clearly planned and specified tasks, through pampering of crucial employee groups, to subtle ways of seducing people into additional effort in order to maintain their future chances of promotion, bonus, or respect within the group. This ranges from the careful headhunting of CEO's, through the design of inspiring and luxurious workplaces to organizational practices testing the limits of what is legitimate in terms of bad employment contracts and working conditions.

## Research on strategic HRM:

**a lack of foundation** Until quite recently strategic HRM literature dealt with employees in a rather anonymous way. It dealt with a "workforce" rather than individual employees. Just like in the movie "I Robot" all employees have the same face in this approach. But in reality there is no such thing as an anonymous workforce. Work is the result of the effort of individual employees, and every employee has his/her face and story. Without knowing and acknowledging this individual story, or showing at least some minimal level of interest therein, managing people in organizations is not to be recommended. Whenever one wants to elicit more complex contributions and/or additional effort from people, more than just a minimal level of interest is required.

To me this is an essential issue. When a manager does not have a fundamental interest in and appreciation of individual employees and their stories, motives, backgrounds, wishes, and worries, I would advise to manage something else. There are great jobs available in managing money, technology, real estate, information. Chances are –by the way- that one is not able to be fully effective in such a management position when one avoids a deeper level of contact with individual people, but this is just a remark on the side.

More important is the following: I'm convinced that keeping a distance as management towards employees is ultimately not to the advantage of any organization. Basically, here lies an organizational choice which determines whether the human factor in an organization is considered to be purely instrumental or a value in itself. Human resources are no different in this respect than other resources. Without affective attachment with and deep respect for resources, the road is clear for calculated exploitation. Short term profit can threaten survival and functioning in the long run, no matter what the scale. This holds for an individual professional, entrepreneur or professor who works too much, exhausts himself and ends up work incapacitated because of burnout. It holds for an organization asking too much from its employees, losing the goodwill necessary to face

the next challenge. It holds for the population of a planet draining natural resources systematically.

The anonymous approach of “employees as a workforce” is reflected in the research that has hitherto been performed in the area of strategic HRM. Some have even questioned whether strategic HRM is really about people at all, and they call for putting the “H” back into HRM. At first this call was limited to a subgroup of researchers called “critical theorists” (Legge, 1995; Bolton & Houlihan, 2007; Fleetwood & Hesketh, 2007). Nowadays this call is also common, however, in the more quantitative-empirical mainstream in the field (Paauwe, 2004; 2009; Guest, 2011; Wright & McMahan 2011). Until recently research mainly contained observations about the association between management actions on behalf of the organization on the one hand and organizational performance on the other, without much understanding of how linkages between the two actually come about through the people in the organization.

Formulated a bit more technically: research in strategic HRM lacks a micro-foundation. Micro refers to the level of the individual employee in this context. The orientation in research has hitherto been predominantly macro, e.g. focused on the organization and its environment (market, government, technology et cetera).

**The bathtub model** The field of strategic HRM shares the problem signalled in the previous paragraph with many other social sciences. This was described very clearly in 1990 by the American sociologist James Samuel Coleman (1990). As an example he mentions the classic work by Max Weber, who aimed to explain differences in the level of capitalism between societies based on differences in protestant religious backgrounds in these same societies. This is indicated by the top line in figure 2.

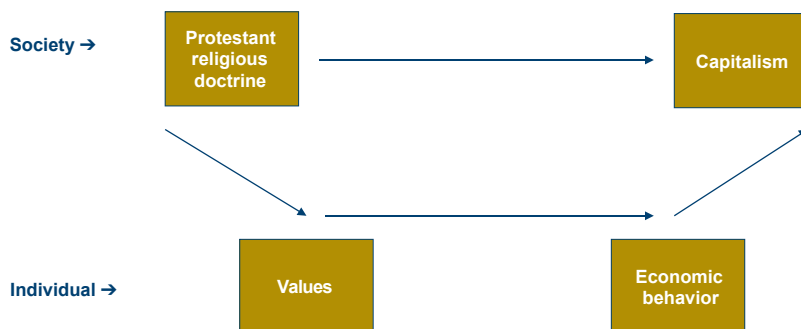


Figure 2: Bathtub model Coleman (1990) representing Weber's theory

But countries cannot display a capitalistic (or other) societal system without individual people shaping and enacting it. Therefore, such is Weber’s starting point, it is necessary to presume an intermediary process between protestantism and capitalism which is situated at the level of the individual person. This process is supposed to operate as follows: a protestant religious conviction translates into individual values of the citizens and these individual values in turn determine the individual economic behavior of these individual citizens (as entrepreneurs/employers, as employees, as consumers). All these individual economic behaviors, together, lead to the type of societal interaction which can be characterized as capitalism. A meta-theoretic model of the form described in figure 2 is called “Coleman’s bathtub”. In figure 2 the lines on the bottom represent the bathtub model, using Weber’s theory as an example.

Coleman (1990) shows how there are many subfields and research issues in the social sciences that require a similar macro-micro-macro approach. Managing employee work behavior with the aim of achieving organizational goals/advantage, in other words strategic HRM, is one of them, I believe. The bulk of the early research in strategic HRM tried to establish a direct link between strategic HRM and organizational performance. This is represented by the top line in figure 3.

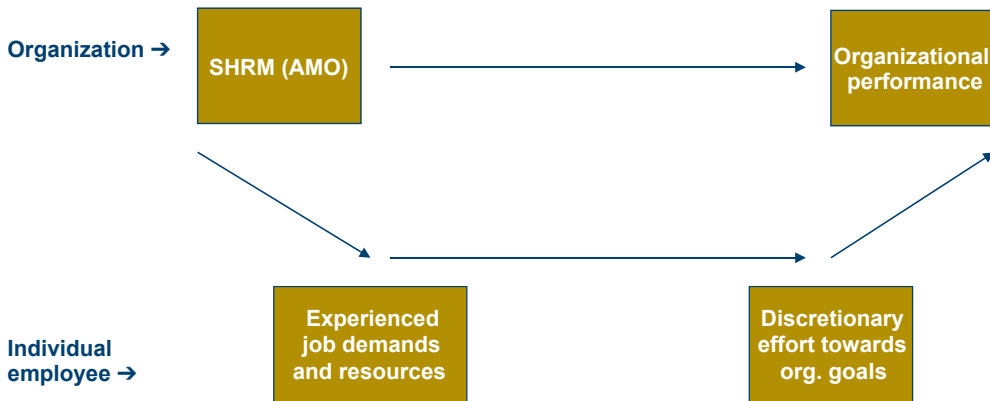


Figure 3: Bathtub model of strategic HRM

Over the past few years various authors have suggested to use bathtub-type of models in research on strategic HRM (Nishii & Wright, 2008; Boxall & Purcell, 2011). They are part of a wider trend in the general field of strategic management to search for micro-foundations (Abell, Felin & Foss, 2008; Coff & Kruscynski, 2011). But what exactly would

need to be included on the bottom lines of such a bathtub model, when applied to the area of strategic HRM? My proposal is to combine the call for exploring micro-foundations with the theoretical model that is most commonly used when researching HRM as a process, and this is the AMO-model which we have already introduced above. The result of this exercise is represented in Figure 3. This is a bathtub model of strategic HRM.

In the figure it is represented by the bottom lines how policies, routines and actions on behalf of management, aimed at creating appropriate abilities, motivation and opportunities in and for employees lead to organizational performance through discretionary effort. This decision to invest effort in organizational goals is not abstract, neither in terms of person, nor in terms of time: it is about the concrete effort of an individual employee, today. This is how work operates: day-in, day-out, through specific individual people and their blood, sweat and tears.

In order to complete the bathtub -by analogy with Coleman (1990)- the model on the bottom needs to be extended from 1 to 2 intermediary steps. In the Weber example elaborated by Coleman (1990) we could see how protestant religious ideas only translate into economic behavior because these are internalized as the values individual people hold. In recent literature in strategic HRM attention is therefore paid to the way intended HR policies and (line) management actions that implement such policies translate into so-called HR perceptions of employees (Nishii & Wright, 2008; Veld, 2012). Starting out from a broad definition of strategic HRM (e.g. including staffing, leadership, personnel instruments, and the work system in place) I believe that the construct of HR perceptions is actually quite limited. I prefer to propose that policies, routines and actions on behalf of management will only translate into the required employee discretionary effort after they have translated into the job demands (assignments, work goals, task prescriptions et cetera) and job resources (task variety, job control, feedback, social support, role clarity, financial reward) necessary to get the job done (Meijman, 1989; Humphrey, Nahrgang & Morgeson, 2007). I am not alone in this view. Snape & Redman (2010) as well as Boxall & Macky (2009) propose similar views. The important point is that at this stage it is all about the evaluations and assessments by the individual employee of the demands and resources in the job. It is –in one word- about the way employees experience work (Van Veldhoven, 1996). This leads us to the field of work psychology.

**Work psychology** The academic discipline that specifically studies work behavior and its relationships with work characteristics (job demands and resources) is called work psychology (Arnold et al., 2010; Drenth, Thierry & De Wolff, 1998). This research area is now over 100 years old and is intertwined with the roots of psychological

research as a whole. My central proposition for today is that work behavior is essentially the micro-foundation that strategic HRM is looking for<sup>3</sup>. Without this foundation strategic HRM is not “about people” but “stepping over people”.

During 100 years a clear picture has emerged within work psychology of the factors that are involved in human work behavior. These insights are important when it comes to answering important questions about individual performance, safety, health and well-being at work. Here are some examples of such questions:

- How many hours a day is an employee allowed to work?
- How much rest should an employee get to balance these working hours?
- Which elements make work difficult and complicated?
- Which elements ensure that an employee can perform a task well?
- How many tasks can somebody do without a break before he starts making mistakes? What role is played in this context by the number of working hours and the time of day?
- Which factors cause emotions in employees?
- Which task elements require specific knowledge, skills and abilities, and therefore also require additional pay?
- What motivates people to work? And how can this work motivation be stimulated?
- What does a person miss when he becomes unemployed?
- Which elements of work behavior are functional, which are not?
- Until what age can an employee continue to work, and does this depend on the type of work?
- How do we reintegrate people who are unable to do their job because of health problems or how can we help them find an adapted job?

My own contribution to work psychological research has been especially in the area of work-related health and well-being. The Effort-Recovery Model proposed by my PhD supervisor Theo Meijman (1989) has been a source of inspiration in my research for more than 20 years. What I like about this model is essentially the concept of man that it describes. On the one hand it explicitly recognizes that humans are made to cope with

---

<sup>3</sup> As a scientific discipline work psychology is intertwined with organizational psychology. This area is focused especially on social relationships within organizations, for example the relationship with supervisor and colleagues, relationships within and between teams et cetera. This inaugural lecture attempts to build a bridge between strategic HRM and work psychology. Others have previously built bridges between strategic HRM and organizational psychology. For examples, see Bowen & Ostroff (2004), Nishii, Lepak & Schneider (2008) or Boswell (2006).

considerable workloads: we are strong. On the other hand it emphasizes how people need to rest in order to keep functioning: we are limited and vulnerable.

Meijman's model (1989) discusses how job demands lead to job performance through work effort. Factors external as well as internal to the worker determine the extent to which load effects (like fatigue and reduced motivation to continue working) occur as the working day proceeds. These external factors he calls job control opportunities. Nowadays the range of demands-compensating factors has been extended, and we would use the more general term "job resources". The internal factors Meijman calls "work potential", but we probably would use the term personal resources now (Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Bakker & Demerouti, 2007). A crucial starting point in Meijman's model is that work needs to be accompanied by rest. Load effects caused by work disappear by nature when the employee takes appropriate rest. Having rested, the employee is ready to return to a new working day in a similar energetic state as yesterday. When effort levels supersede recovery possibilities from one workday to the next, over time an accumulation of load effects will take place. If this accumulation lasts too long, load effects will start to change into load consequences, e.g. more serious health problems. The extent to which such accumulation takes place depends -again- on job control opportunities (job resources) and work potential (personal resources).

My first contribution to this area of work psychology has been to develop a survey method to measure the way job demands and resources (psychosocial workload) are experienced at work and what consequences these generate for workers (VBBA; Van Veldhoven & Meijman, 1994; Van Veldhoven, 1996; van Veldhoven et al., 1997). When I developed this questionnaire together with Theo Meijman I was not expecting that more than a million Dutch workers would eventually fill in these questions. The VBBA has hitherto been used in over 10.000 smaller and larger projects in the area of work, health and well-being. Furthermore, the questionnaire has also been used in hundreds of published academic journal papers, and an even larger number of master theses.

The improvement of psychosocial working conditions and associated absenteeism/work incapacity was high on the societal agenda in the Netherlands 20 years ago. Psychological disorders and burnout are still high on the list of factors causing absenteeism in the Dutch workforce (16% of all days lost). Moreover, when asked about which factors needs improvement as to the working conditions, job stress is mentioned most often (by 41% of all workers), according to the Dutch national working conditions survey (Hooftman et al., 2011).



Balance is a delicate thing when it comes to human effort. On the one hand stimulation and activation are necessary to perform well. On the other hand too much stimulation and activation are experienced as “pressure”. On the one hand a certain wealth of job resources is necessary in order to cope with job demands, on the other hand too much of such wealth can also be experienced as “pressure”. Whatever balancing act is required, work performance itself is always key: employees will protect the quality of their work performance through thick and thin, even when there are (some) negative consequences for their own health and/or well-being. When work performance breaks down in a person who normally performs well, this is usually a bad sign. This is when a worker enters the end stage of long-term overtaxing and is “exhausted”.

By now we know quite a lot about which work factors contribute to exhaustion in workers, and how this comes about. In my PhD thesis and afterwards I have studied how a handful of factors derived from the expanded Job Demand-Control Model (Karasek & Theorell, 1990) can explain to a large extent the differences between workers in work-related fatigue, work pleasure and organizational commitment. The level of explanation achieved becomes even higher when we turn to the systematic differences between groups of workers (departments, job groups) and organizations as a whole (Van Veldhoven et al., 2002; Van Veldhoven et al., 2005).

Once the use of the VBBA in occupational health care practice increased, I found myself in the luxury position of being able to study the patterns of work and health in the Dutch workforce based on a cumulative database generated at SKB (a research and consultancy firm in Amsterdam). This stimulated publications on fatigue (Van Veldhoven et al., 1999) and mobbing (Hubert & van Veldhoven, 2001). Following Meijman, rather than use the word fatigue, I prefer to use the term “need for recovery”. This term emphasizes that we are not considering some side effect or waste product of work, but a biologically based human need to balance effort with rest. There are many parallels between “need for recovery” and other basic human needs. On the one hand satisfying the need for recovery is necessary for maintaining homeostasis (survival), on the other hand it is an opportunity for building competitive advantage (by building an energy buffer that can be employed for future effort).

In 2003 -together with colleague Sjaak Broersen- I reported about need for recovery in the first 67,000 employees that completed the VBBA via Dutch occupational health services (van Veldhoven & Broersen, 2003). As we expected, job demands (speed and amount) were the most important predictor of need for recovery, but other psychosocial work factors also contributed, like: emotional and physical workload, problems with colleagues

and limited opportunities for participation in decision-making. Research has shown that need for recovery is a risk factor for absenteeism, occupational accidents and coronary heart disease (Van Veldhoven, 2008). The strongest evidence in this area was provided by a research group at Maastricht University, in the context of a national research program on “Psychological fatigue in the workplace” (Mohren, Jansen, van Amelsvoort & Kant, 2007). Based on all this evidence it is recommendable to monitor for early signs of extreme need for recovery in individual workers, groups and organizations and take appropriate action. Not only the Dutch and Belgian government, but also several specific branches of industry as well as larger companies have implemented such monitoring instruments based on the VBBA, and these are now in routine use (De Witte, Vets & Notelaers, 2010; Bourdeaud’hui, Janssens & Vanderhaeghe, 2004; Van den Bossche & Smulders, 2003; van Veldhoven, Dijkstra & Broersen, 2003; Bolk & van Veldhoven, 2001). The data that result from such national or sectoral monitoring provide great options for analyses resulting in several collaborative publications. It is a pleasure to be able to work together on such valuable research materials with colleagues (Kompier, Taris & van Veldhoven, in press; van Veldhoven & Beijer, in press; Verdonk, Boelens, van Veldhoven, Koppes & Hooftman, 2010).

An important suggestion –originally made by Robert Karasek (1979)- is that the combination of high job demands and a lack of job control will have an especially detrimental effect on work-related health and well-being. We have already seen that this idea also figures in the effort-recovery model. The idea is elaborated further in several more recent theories on job stress, like the Job Demands-Resources Model (Demerouti, Bakker, Schaufeli & Nachreiner, 2001) and the DISC-Model (De Jonge & Dormann, 2003). The proposed interaction effect is not consistently found in studies, however (Van der Doef & Maes, 1999). Cumulative data of the VBBA have also been used to test this interaction. It was found that the classic demand-control interaction was much less strong in this large Dutch workforce sample than theory would lead one to expect. However, the role of job control as a demands-compensating factor can also be taken over by other job characteristics, like task variety or social support from colleagues and/or supervisor (Bakker, van Veldhoven & Xanthopoulou, 2010).

Within work psychology, research on work-related recovery has received a considerable amount of attention during the past decade. A series of authors has done studies on the effects of short breaks during the day, evenings, weekends, sabbaticals, and holidays on work, health and well-being (Sonnentag, Perrewé & Ganster, 2009; Geurts, 2011). Especially the extent of psychological detachment from work during non-work time (e.g. not thinking about work when off the job) appears to be crucial for adequate recovery

(Sonnentag & Fritz, 2007). A factor that is also proposed to play a role are the recovery opportunities available in the job and in private life. Van Veldhoven & Sluiter (2009) showed-using the VBBA- how recovery opportunities contribute to occupational health in three different samples (general workforce; ten institutions for mental health care; a specialized medical clinic) and in relation to three different indicators (need for recovery, sleep quality and health complaints).

Research on the influence workers have on their working time is also receiving a lot of attention these days, because many organizations in the Netherlands are experimenting with the liberalization of fixed working hours and fixed working days as part of “the new ways of working”. Internationally, the Netherlands appear to play a leading role in this area. When considering working hours, the Netherlands has been somewhat atypical for quite a while, even within Europe (Parent-Thirion, Fernández Macías, Hurley & Vermeylen, 2007). Of all European countries the Dutch have the lowest number of weekly working hours per member of the workforce (33 hours, whereas 39 hours is the European average). The picture changes, however, when we start taking commuting time and voluntary work into account (overtime, housekeeping, child & elderly care). If we include all these hours, the Dutch make 62 hours/week whereas 58 hours is the European average. Work performed outside of contract hours is therefore a topic that should receive much more research attention than it currently does.

I have contributed to some of the research that does exist on this topic in the Netherlands (Beckers et al., 2004; van der Hulst, van Veldhoven & Beckers, 2006). The picture emerging from these studies suggests overtime effects on health and well-being are not straightforward. For example, it was found that there is a category of workers who actually like and value overtime: it pays well and is not accompanied by an experience of high pressure. This happens in jobs that require somebody to be present in the workplace, but where the job is not necessarily intensive (passive work). As an example, think of the jobs of attendants or receptionists. In other jobs (active jobs), overtime can be interpreted as a clear sign of work overload, with the expected high levels of job strain as a result. This was shown using TNO-data (general workforce) as well as VBBA-data (municipalities).

Another topic that attracts a lot of attention in relation to work, health and performance is the topic of aging. Using occupational health care services data on periodic health examinations it was shown that the relationship between aging, work and health is complex (Broersen et al., 1996). Later, colleagues René Schalk, Beate van der Heijden, Annet de Lange and I initiated a series of meetings bringing together European work and organizational psychologists working on the topic of aging. We reviewed existing

knowledge, and from all of this we learned that some tasks become more difficult with age, but others actually become easier. Tools can be used to compensate eventual diminishing capacities of memory and muscles. All in all, older workers emerge as skilled and reliable employees for organizations. The largest hindrance for their continued employment is probably prejudice (Schalk et al., 2010; Schalk, van der Heijden, de Lange & van Veldhoven, 2011; Van der Heijden, Schalk & van Veldhoven et al., 2008).

A final area that captures my interest within work psychology is working with people. Not only is working with people becoming more and more common as a job, people are also become a stronger and stronger risk factor for health, safety and well-being in such jobs. (Ybema & Smulders, 2002; Hooftman et al., 2011). Emotional workload is causing acute as well as chronic stress responses in the workplace. Managing your own emotions as part of your job is called emotion work, and I have collaborated in research on this interesting issue, for example in police officers (Van Gelderen et al., 2007) and in mental health care providers (Van Daalen et al., 2009). Further, together with Michal Biron I have performed a diary study on emotion work (Biron & van Veldhoven, in press), and investigated to what extent psychological flexibility (Bond et al., 2010) is a useful personality attribute in order to cope with emotional exhaustion in service jobs. Many employees in service jobs report that they are unable to be “themselves” or stay true to their “selves” during this type of work: they ignore their emotions with a view to customer needs, organizational demands or professional standards. PhD candidate Susan Montgomery has a special interest in this area and she studies the role authenticity plays in health and well-being at work. I am curious as to her findings.

Research into work, health and well-being is only a part of the on-going research in work psychology. Colleagues in the field have focussed on other issues, like the errors made during work (important in relation to occupational safety), like work performance (customer service for instance), and like the extent to which employees are behaving like good organizational citizens (OCB) in the organizations that employ them. In summary: an impressive body of knowledge on work experience and work behavior now exists within the field of work psychology.

## Research on work behavior:

**a lack of context** I am convinced -given the materials covered in the previous paragraph- that within the area of work psychology there exists a large amount of insight into which work factors have which consequences for work behavior, and how this work

behavior relates to the safety, health and well-being of employees. Sure there is always more detail to be provided and new topics do emerge, but as the level of knowledge increases the question of societal impact and contribution also becomes ever more important.

The societal impact of the cumulative knowledge on work behavior is -in my opinion- not as big as one could have expected, and -here comes my point- this is because we as work psychologists do not pay sufficient attention to the context of work behavior.

Work does not happen in a vacuum. A short review of the context of work behavior in organizations shows that organizations are purposeful societal actors and these actors' decisions and actions are mostly primarily targeted at achieving organizational goals, not at the people.

Even though this statement may look rather self-apparent, this insight did not come easily to me. Before I came to Tilburg University (end of 2002) I worked in occupational health care practice for 15 years. The VBBA was developed out of the need to contribute to the improvement of the quality of work and working conditions, and to reduce job stress, absenteeism and work incapacity in the West-Brabant area. After some time work and organizational experts (like myself) in the Netherlands and Belgium were able to identify risk factors and risk groups (departments, job groups, subgroups according to age, gender and/or education level). We wrote wonderful reports with even more wonderful appendices based on psychometrically strong information. But what did actually happen with these reports in practice? Not always all that much, was eventually my conclusion. And often this low level of actual results happened in spite of a lot of goodwill, support and initiative on behalf of management and project teams in departments, organizations and branches of industry. In the book "Too tired for paradise" (Van Veldhoven, 2001), that I wrote when I switched from practice to the university, I have described how this felt: all information in our hands, but no or limited results. In dealing with job stress in practice, we often got stuck somewhere between knowing what's wrong and knowing what should be done on the one hand and actually doing something about it on the other.

I had noticed that managers often referred to other important priorities for the organization as excuses for not taking appropriate actions on job stress: they still had to automate workflow, restructure, acquire quality certificates, market new products or services, do a merger et cetera. But I also noticed that sometimes, unexpectedly, such business priorities could suddenly provide opportunities for improvement of stress, health and well-being in the workplace. For instance when a new plant was built, when machines were replaced,

when participation was improved because of a change in ownership, or when there was a merger with another hospital or school. My interest for “context” was awakened.

Only after I switched to Tilburg University did I learn that there is a scientific field that actually is dedicated to the context of human work behavior in organizations: strategic HRM. At the department of HR Studies I have been able to study the interface between work psychology and strategic HRM in more detail<sup>4</sup>.

## Research on the bathtub model

Once arrived at the interface between work psychology and strategic HRM, I found a large area lying open for research, and together with an enthusiastic series of colleagues, PhD students and master students, I have started exploring this area. In the remaining part of this lecture I shall present an overview of the research to date as well as my plans and wishes for future research. The bathtub model is used as a guideline.

Before we start discussing on-going research it is important to nuance the bathtub model in two ways. First, the model assumes that organization and employee have found each other (e.g. organizations select employees for specific jobs, but to an important extent employees also self-select into specific jobs and organizations, see Schneider, 1987) and that they have started the characteristic type of exchange that is called work. This being an assumption, we do not pay any attention here to such issues as recruitment and selection, nor to choice of profession or organization, even though these are important issues. Second, work behavior can only be fully understood when work, organization and worker are further contextualized. At the societal level, HRM and work are influenced by such environmental factors as culture, law, market, technology and organizational history. Institutional and contextual models of strategic HRM and performance place a strong emphasis on such wider environmental conditions (Pauwe, 2004) and the organizational dynamics they entail. Similarly, on the employee side, it is important to understand the individual also in personal context: personality, private life situation, work values, life stage et cetera all influence how an employee views and experiences job demands and

---

<sup>4</sup> In order to do justice to the field of HR Studies, it is important to mention here that, next to strategic HRM, there are also other important research areas, like for instance those concerning specific personnel policies, activities and instruments on recruitment and selection, pay and benefits, training and development, performance appraisal et cetera.

resources as well as work effort. Literature on individual counselling and coaching of workers with problems in health, well-being and/or functioning deals extensively with such individual context variables (Schaufeli & Bakker, 2007). The level of work performance that somebody can and wants to deliver, in other words work capacity (Meijman, 1989), is not fixed. Work capacity fluctuates because of the individual context variables just mentioned. Actually this is currently a lively part of work psychological research, e.g. the study of fluctuations in work behavior from one day to the next, from one hour to the next under the influence of individual context variables, changes in job demands and resources, as well as the individual workers' state of energy and motivation (Ohly, Sonnentag, Niessen & Zapf, 2010) In figure 4, the two important contexts of strategic HRM and work behavior have been included in the model.

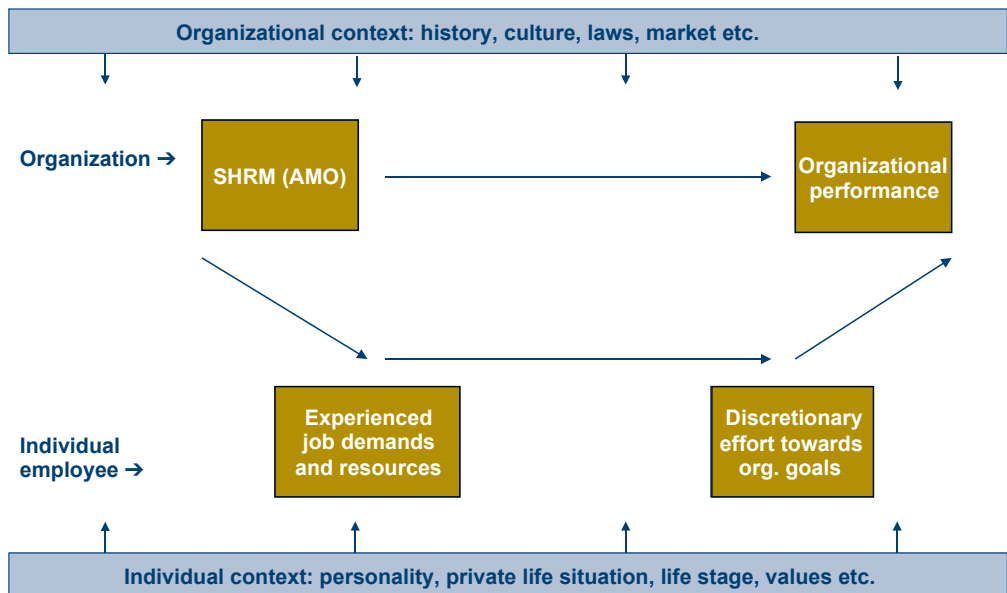


Figure 4: Bathtub model of strategic HRM x context

The model in figure 4 shows there are two important steps in the contribution of strategic HRM to organizational performance. The first of these concerns the creation of appropriate conditions for individual effort. The second concerns the coordination and channelling of individual efforts towards collective goals for the organization. So far, the first of these two transitions (macro->micro) has received much more attention in research than the second (micro->macro). Furthermore, in recent years, research is starting to appear on the complete (macro->micro->macro) chain of events that is described in the model. Below is a review of the three sub-areas mentioned .

***From strategic HRM to the individual employee*** In the stage where strategic HRM is still about formulating organizational goals and implications for personnel, it is an activity for a limited number of actors, be it a complicated activity. Once strategic HRM enters the next stage, where strategic plans and policies are translated into HR-activities, it becomes much more difficult to keep track of the number of people involved, the different roles they occupy, and their actions. If one would want to summarize all the things going on at this stage in a (larger) organization, this is would not be an easy task. This includes leadership, job and workplace design, employment conditions, personnel instruments and a whole series of other things.

It becomes even more complicated when it comes to connecting all these on-going HR-activities to individual employees. Many questions can be asked here, like: are management actions perceived by and do they impact on employees on a one by one basis (activity by activity) or do they operate more in a “gestalt” kind of way? How do management actions affect workers’ experiences of the job? How do they impact on the state of the worker, in terms of pleasure at work, fatigue, commitment to the organization? Do all these HR activities achieve the aim of generating adequate employee work behavior?

Many of the first steps on the road towards doing research about these issues I have walked together with PhD candidate Luc Dorenbosch, and this was a pleasure. In his PhD thesis Luc reports a study in which line and HR managers of 53 departments were interviewed on the way HR activities are implemented in their unit. The HR activities related to six domains that are considered crucial for HRM in the Netherlands. Very different organizations participated in the study: they ranged from hospital to construction factory, from bank branch to municipality, from surveillance service to mobile repair firm. The HR-activities as reported by the line and HR managers are related by Luc to work experiences and worker states/behaviors of 772 employees working in these units. The results show that relationships between HR activities and worker experiences and states/behaviors are less strong and clear than is often assumed in the literature. What managers say they do and offer is only to a limited extent perceived and experienced by workers. It also appears to depend on the HR activity in question. The strongest correspondence between managers and employees Luc found for pay and work-home balance practices. For performance appraisal, however, there was a complete lack of correspondence between managers and employees.

The relationship between HR activities in the area of training and development on the one hand and proactive employee work behavior on the other -based on this same study- has been investigated in more detail (van Veldhoven & Dorenbosch, 2008). The



corresponding macro-micro multilevel analyses show that training and development practices, as expected, correlate with more proactive behavior and initiative. In another study based on this project (Van Veldhoven, Debats & Dorenbosch, 2009) we compared judgements about HR-effectiveness between HR managers, line managers and employees. As expected, executors of HRM (read: HR and line managers) rate HR effectiveness more positively than customers (read: employees). Interestingly, line managers rate HR effectiveness more positively when they are more actively involved in executing HRM. This is probably a classic example of an attribution error where actor judgements are self-serving and self-justifying.

In another study -together with Brigitte Kroon and Karina van de Voorde (Kroon, van de Voorde & van Veldhoven, 2009)- the macro-micro linkage between HR-activities and emotional exhaustion was investigated. All HR-activities in this study were so-called “High-Performance Work Practices” and were rated by HR-managers of 86 organizations. Almost 400 employees of the same organizations completed a survey on their emotional exhaustion. The more high-performance HR-activities were practiced, the higher was the employees’ emotional exhaustion, an effect fully mediated by the level of job demands as also rated by employees. This fits well with critical HR literature arguing that high performance practices are beneficial for organizational performance, but they may also be accompanied by increased levels of work intensity, effort and job stress.

A final line of research on the macro-micro linkage I did together with former colleague Birgit Schyns, now working at Durham University/UK. We studied how leadership climate in departments is related to individual job attitudes held by employees (Schyns & van Veldhoven, 2010; Schyns, van Veldhoven & Wood, 2009). For these analyses we used VBBA data in the Netherlands, and in England we used data from the Work Employment Relations Survey (WERS). Both these data sets are characterized by the fact that not only do they contain many individual respondents, the data can also be traced back to departments (VBBA/WERS) and organizations (VBBA)<sup>5</sup>. The analyses showed that both the individual relationship of an employee with the supervisor and the departmental leadership climate contribute to the organizational commitment and job satisfaction of individual employees.

---

<sup>5</sup> Most larger studies in the literature on work, health and well-being are national random samples from the labor force. Although such data are excellent for many policy-related purposes, they lack possibilities to analyze patterns at the level of departments and organizations.

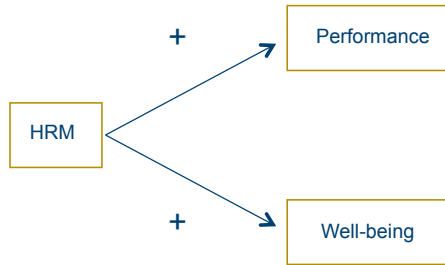
***From individual employee to organizational performance*** As mentioned previously this area has received less attention in the literature, and this is also true for my own research. There have been studies linking employee survey data to outcome indicators of teams, departments and organizations but individual employee survey data are usually reduced to group averages here. For example, we used survey data from employees (over 18,000) gathered across a 5-year period at Rabobank and coupled these with financial performance indicators of the bank branches (over 200). After aggregating the survey data to branch averages we could investigate how work experiences related to organizational performance across time (Van Veldhoven, 2005). Karina van de Voorde has written a wonderful PhD thesis and a series of journal articles on these data. The branch averages at Rabobank of the work experiences do correlate substantially with branch performance. Moreover, work experience averages tend to precede in time the branch performance indicators (financial profit, productivity) rather than the other way round (van de Voorde, 2010; Van de Voorde, Paauwe & van Veldhoven, 2010; Van de Voorde, van Veldhoven & Paauwe, 2010). Karina van de Voorde's studies build on a long research tradition that can show strong results indicating that organizational climate/work experience has causal consequences for achieving important organizational outcomes, whether this concerns profit, productivity, customer satisfaction or reduced numbers of occupational accidents. Notwithstanding this line of research in climate, research on the micro-macro linkage is still in its infancy: reality does appear to be much more complex than a simple group average on individual survey scales can represent.

Now that the link between individual survey data and organizational outcomes is becoming clearer, new questions can be asked, like: Just how does organizational performance emerge from all these individual experiences and behaviors? How do all individual efforts combine into the achievement of a collective goal? Within the literature on strategic HRM such "bottom-up" emergence of organizational performance is acknowledged to exist, but it hardly receives any further elaboration except for the notion that an important role is probably played here by the social relationships between the members of groups (Delery & Shaw, 2001; Lepak, Liao, Chung & Harden, 2006; Chadwick & Dabu, 2009). One important exception needs to be mentioned, however. This concerns the work by Jody Hoffer Gittel on relational coordination. She defines relational coordination as the mutually reinforcing process of communication and relationships which is targeted at integrating the elements of a task. In over 10 years of research she has demonstrated that this process of relational coordination is influenced by HRM (Gittel, 2001) and has important consequences for the performance of groups and organizations varying from health care to airline industry (Gittel, Seidner & Wimbush, 2010).

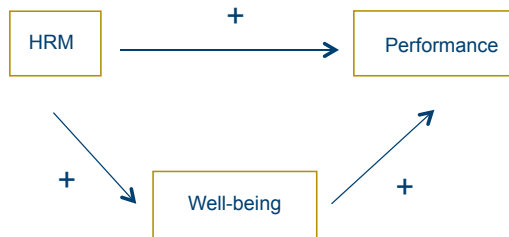
In a more general sense, answers to the question as to how individual efforts combine into organizational performance can be found in research on coordination in organizations and in coordination theory (Malone & Crowston, 1994). This topic and theory have received no or hardly any attention so far from work psychology or strategic HRM researchers. These two fields of research appear to be preoccupied with the front end of the bathtub model (e.g. how does HRM impact on individual employees; how can employees be influenced so as to deliver optimal effort) rather than the back end of the model (e.g. how do individual efforts contribute to the ultimate organizational results?).

Coordination, Malone & Crowston (1994) say, is all about managing the dependencies between activities. They discriminate between several types of dependencies and several types of coordination processes. Within organizations this -amongst others- concerns the dependencies of all actors who perform tasks that are supposed to contribute to a larger, group level goal. All the processes involved therein -including decision making and communication- Malone & Crowston call the coordination structure. A theoretical perspective like Malone & Crowston's might elucidate just how different types of employee behaviors as well as leadership behaviors together lead to good or bad results for organizations. Is it sufficient that all individual employees perform their basic task well? Or are other types of work-related behaviors equally essential here, like organizational citizenship behavior, personal initiative and creativity? Should a supervisor actively manage the coordination of efforts between department members or rather not? How much of each does a coordination structure need in order to function properly? Does this depend on the goal to be achieved, the type of job, the level of specialization, the type of employee (Gittel, Weinberg, Bennett & Miller, 2008)?

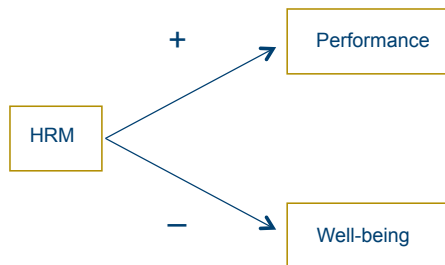
***The bathtub model as a whole*** Finally, there is also an emerging line of research which studies the complete chain of macro-micro-macro relationships in the bathtub model. In short, this boils down to studying all the connections between strategic HRM, employee well-being and organizational performance simultaneously. We need to take a broad view on what we mean with the term well-being here, e.g. it may refer to happiness, satisfaction, commitment or involvement; but it may also refer to health, safety and the absence of job stress; or it may refer to good quality of the social relationships and atmosphere, trust and justice in organizations (Grant, Christianson & Price, 2007). When starting out from the bathtub model, the relationships between HRM, well-being and organizational performance can take any one of four possible forms, and I would like to thank Riccardo Peccei (King's College London) for spelling these out. The four types of relationships are represented in figure 5 (based on Peccei, 2004; Peccei, van de Voorde & van Veldhoven, in press; Dorenbosch, 2009).



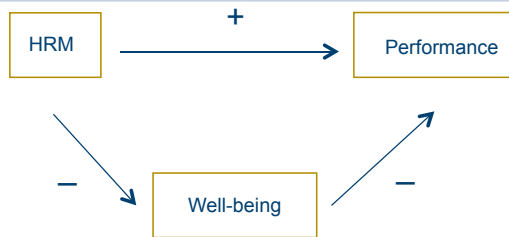
Option 1: HRM as the great benefactor.



Option 2: HRM improves well-being, but this is a means to an end.



Option 3: HRM improves performance, but there are unintended side-effects for well-being.



Option 4: HRM improves performance at the cost of well-being.

Figure 5: Four ways of connecting HRM, well-being and organizational performance

The first two options have in common that HRM is good for the organization and the employee alike (mutual benefits). In option 1, HRM is a kind of big benefactor, and any positive impacts on employee well-being and organizational performance are unconnected. In this option, HRM strives for positive impacts for employees and organizations, but the one goal is not necessarily connected to the other. In option 2, the happy productive worker, the positive impact of HRM on employee well-being is intended as an instrument towards achieving good organizational performance.

In the last two options, the common denominator is that employee well-being and organizational performance are at odds (conflicting outcomes). For option 3, effects of HRM on organizational performance are positive. HRM does have unintended negative side-effects for employee well-being, however. Finally, in option 4, positive organizational results are achieved at the cost of reduced employee well-being.

Based on my experience, I'm convinced that in practice cases can be found to exist for each of the four options described above. From a research point of view it is important to find out which of these options is most prevalent.

Karina van de Voorde performed a nice literature review on this question (Van de Voorde, Paauwe & van Veldhoven, in press). She found 36 quantitative empirical studies in the literature containing variables for HRM, employee well-being as well as organizational performance. The findings are thought-provoking, for they are different for different types of well-being. For happiness and relationships it was found that HRM is positive for employee well-being and organizational performance (mutual benefits). This points in the direction of option 2: employee well-being as instrumental for better organizational performance. For health, evidence was found for good organizational performance to be associated with less good health and more job stress (conflicting outcomes). Option 3 was found to apply best for this type of well-being, e.g. HRM causing unintended side-effects for health.

The next step is to do more and better empirical studies on the bathtub model as a whole. The UK data from the WERS are particularly well-suited for this purpose. Over 1,200 workplace managers were interviewed on such issues as HRM and organizational performance, whereas over 15,000 employees employed in these workplaces filled out surveys about well-being at work. Together with Stephen Wood (University of Leicester), Lilian de Menezes (City University London) and Marcel Croon (UvT) I have investigated how HR-practices aiming for high commitment by means of job design and increased opportunities for participation impact on organizational performance indicators like

financial profit, productivity, absenteeism and product/service quality via employee well-being (Wood, van Veldhoven, De Menezes & Croon, in press). From these analyses a differentiated picture emerges. High-involvement HRM (more participative opportunities and associated organizational facilities) is associated with better profits, productivity and quality, partially through lower job satisfaction. This result fits with option 4 in figure 5, exploitation. An indicator for job stress is also available in the WERS. Here, results are more in line with option 3, e.g. High-Involvement HRM is associated with more job stress but this is not instrumental towards achieving better performance. Job stress appears to be an unintended side-effect. For job design-related HRM it was found that this was related to better organizational performance (all four indicators) via improved job satisfaction. This is completely in line with option 2.

**Future research** As the previous paragraphs illustrate, there is still a lot of work to be done. At the end of the content-related part of my lecture I would therefore like to present some avenues for future research that I would like to pursue in relation to work, health and well-being.

***The antecedents of job demands and resources*** As discussed, when connecting strategic HRM to individual employee behavior the AMO-model is often used (Lepak et al., 2006; Boxall & Purcell, 2011; Jiang Lepak, Han, Hong Kim & Winkler, 2012). But is it a coincidence that abilities (A), motivation (M), as well as opportunities (O) all are in the category that is referred to as job resources in work psychology? Autonomy and variety, training and development, pay and benefits, all these concern positive factors that are offered by the organization. The field of HRM is dominated by a positive outlook: it is even anchored in the positivity of the words used.

For necessary balance it is important, however, to emphasize more and research better how job demands, the other elemental category of job factors in work psychology, reach employees, based on strategic HRM. Maybe we can discern different types of demands, much in contrast to the well-known A, M and O factors? For example: which Challenges (C) are there for the abilities (A) of workers? In which talent areas do they still need to improve and develop themselves? Which setbacks (S) do workers experience during work that require motivation (M), persistence, maybe even courage to go back to work again? And finally, which hindrances (H) are there in the job and in the organization that need to be overcome? Where opportunities (O) facilitate task performance and performance improvement, hindrances actively counteract these.

Two out of three of the CSH-factors just mentioned are part of the so-called Challenges-Hindrances model of job stress (Cavanaugh, Boswell, Roehling & Boudreau, 2000; LePine, LePine & Jackson, 2004), so there seems to be a promising as well as logical link with a job stress model that is currently receiving more and more attention in work psychology. Research on the antecedents of job demands and resources could lead to new insights in how strategic HRM relates to health, well-being and performance at work. In embarking on such new research it is important to learn from neighbouring research fields. For instance, there is the work by Wagenaar (1990) on the TRIPOD-model of safety in organizations. In this tradition a considerable amount of research has already been done on the organizational conditions which influence job stress, in combination and/or interaction with the basic job characteristics of Karasek's (1979) Demand-Control Model (Akerboom & Maes, 2006). Another example of relevant existing work concerns several studies done by researchers from TNO Work & Employment. They studied organizational characteristics as antecedents of work pressure using national employer- and employee-based survey databases (Smulders & Houtman, 2004; Wiezer, Smulders & Nelemans, 2005). Organizational characteristics like a complex and instable environment, organizational change, and increased (quantitative) employment flexibility were associated with higher work pressure (Wiezer, Smulders & Nelemans, 2005).

When we succeed in connecting HRM to job demands and resources then how can we further connect these experiences of work factors to engagement and burnout? Essential for this line of research, like for any research in HRM, is an answer to the question how HR practices can best be conceptualized and measured in research. PhD candidate Susanne Beijer dedicates her thesis to this important question. This is a pleasant and instructive collaboration, and -together with Jaap Paauwe and Riccardo Peccei- I very much look forward to the insights this project will bring.

By the way, Susanne has a special interest in the clarification of important constructs in HR research. During the past two years we conducted a study together with Elaine Farndale (Philadelphia State University) for the Society of HRM (USA) in which we collected data on engagement. Four multinational companies participated. 926 employees from a range of workplaces in Europe, India and China completed the questionnaires. Analyses by Susanne show that for the construct of engagement it is important to distinguish between engagement in the job versus in the organization, and whether the engagement is affective (employee feelings) or behavioral (employee demonstration of initiative and learning (Beijer et al., under review).

***The role of recovery in the coordination of efforts towards results*** Earlier we discussed that research on coordination of employee work behaviors in organizations is in its infancy, at

least as far as the areas of work psychology and strategic HRM are concerned. However, there are certainly opportunities here. In the area of relational coordination there is already a body of research to be discerned (Gittel, Seidner & Wimbush, 2010).

Thinking about how I could connect my own research interests to coordination, my first idea would be to revisit the topic of work-related recovery. The issue of effort and recovery can be conceptualized as one of the basic dependencies that require coordination in organizations. For reliable performance the organization depends on the effort but also on the recovery of individual employees. Within a team, members are dependent on their colleagues' efforts, but also their recovery. Maybe it is hard to have a clear practical idea of what lies behind these abstract words. If so, please imagine that you are on the list of patients that is to receive major surgery at hospital X on Monday morning. Now, what would be your response to the plans of the rather young surgeon and the not-quite-so young anaesthetist to go out this weekend, both on Friday and on Saturday night? And how would this affect your job as an operating room nurse that is supposed to assist during the surgery?

Thinking about this topic all kinds of questions emerge: how is the recovery aspect being coordinated in modern organizations that are experimenting with time- and place independent working ("new ways of working", see Baane, Houtkamp & Knotter, 2010). What are the business consequences if there is limited coordination of recovery among the members of a team, department or organization? We do not appear to have much direct research evidence about such issues. More knowledge on such issues is important, in first instance from the point of view of customers and the general public. But obviously it is also important for employee well-being. Further, it appears evident that somehow the coordination of effort and recovery is influenced by the way professional groups, organizations as well as societies think about and value work, effort and recovery. As such, the topic appears to share a common denominator with studies on psychosocial safety (Dollard & Bakker, 2010), and here lies a further option for future research.

***The camping tent model: "life advantage through organizations"*** In the bathtub models of figures 3 and 4 I have used the organizational level as the beginning and end point of the chain of events. This has been a deliberate choice, in order to stay in line with the business-like setting that is common in the area of strategic HRM. At the end of my research agenda I would explicitly like to strike another chord, however. Senior management -acting on behalf of the organization- is not the only actor formulating their goals, pursuing their strategy, and making their tactical decisions: individual employees and individual supervisors also do this. In addition: individual employees and supervisors



bring many of the abilities, motivation and opportunities (AMO) to do a job with them to the organization, rather than the other way round.

My entire lecture up to this point could therefore erroneously be interpreted as suggesting that organizations can completely govern and possess employees. Obviously, this is not the case. Reality is that individual employees and organizations each have their own goals, costs and benefits in relation to daily work effort. The individual employee is not a passive receiver of HRM but actively builds HRM while striving for personal goals and targets, of which protection and promotion of safety, health and well-being can be part. When we pursue this line of reasoning, we can turn the bathtub model upside down. We can argue that an employee is trying to achieve life advantage through organizations.

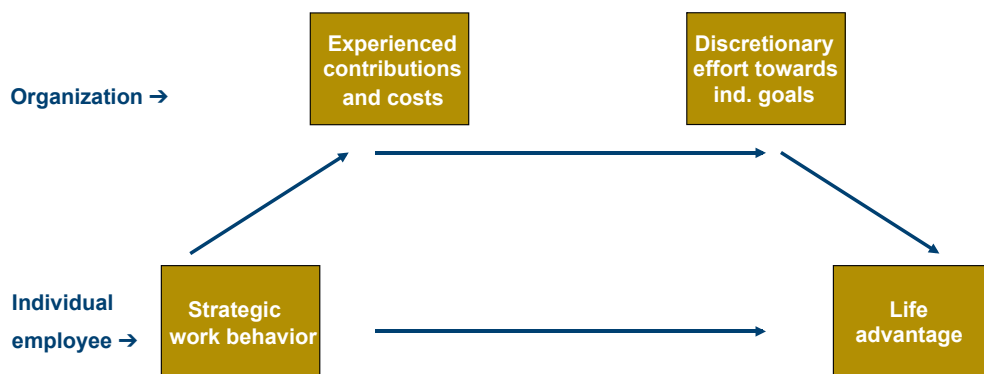


Figure 6: Camping tent model of strategic work behavior

In the image of figure 6 I recognize a camping tent, and I would therefore like to name this type of model a camping tent model, if only because of the ease of contrast this brings when comparing this model to the bathtub model by Coleman (1990). In the camping tent model the worker initiates strategic work behaviors that are targeted at achieving individual goals and life advantage, partially through organizations. In as far as the organization is supposed to contribute, a condition for employee success and advantage would appear to be that the worker's strategic behaviors are perceived and evaluated by the organization, and consequently followed by organizational actions which are actually going to help the employee towards goal achievement and advantage. In a figurative sense one could say that employees pitch a tent to achieve life advantage<sup>6</sup>.

<sup>6</sup> In this context it is striking to see that in many of the recent societal actions against governments, banks and financial institutions across the globe streets and squares have been occupied by tented camps in order to give these actions more force ("the Occupy-movement": see [www.wikipedia.org](http://www.wikipedia.org)).

This certainly applies to the self-employed. Self-employed workers are the fastest growing part of the Dutch workforce. This country numbers an estimated 500,000 to 1,000,000 entrepreneurs, especially self-employed without personnel. PhD candidate Josette Dijkhuizen -whom I supervise together with René Schalk- studies the specific context of self-employed workers, starting out from the Job Demands-Resources Model (Demerouti et al., 2001). For this purpose she has adapted the model and specified it in terms of the job demands and resources which apply specifically to entrepreneurs. She studies how these specific demands and resources relate to objective, financial indicators of entrepreneurial success and to the subjective success as experienced by entrepreneurs themselves. I am curious as to the relationships Josette is going to uncover.

**Conclusion** We have started with the wink of an eye. Next, we have discussed how the influence of strategic HRM on organizational performance can be conceptualized as a bathtub model. This influence comes about via the job demands and resources that an employee experiences during work, and the accompanying choice to devote effort towards organizational goals.

The foundation of the bathtub requires further elaboration in research. Knowledge about work behavior is essential here. The field of work psychology can deliver such knowledge, on condition that work psychologists are prepared to pay more attention to the context of work experience and work behavior.

I discussed my own research in work psychology, paying special attention to research at the interface of strategic HRM and work behavior. I also presented several possible avenues for future research. The last of these avenues switches roles for individual employees and organizations, resulting in a camping tent model.

I look forward to getting to work -together with interested organizations- along the lines discussed, building further bridges between work psychology and strategic HRM. I have been most explicit above about research. But in the educational arena I would argue for a similar approach. I am convinced that students trained in organizational as well as individual level topics relating to HRM, work and employment have an important advantage when they graduate. On the one hand, this derives from the fact that it is becoming ever clearer that in practice it is not policy that counts, but implementation. And implementation is not just what (line) managers claim to do with HR policies, it is about how all HR activities translate to the individual worker: "What does all of this HRM really mean for me and my job?". Insight in work experiences and how these relate to energy and

motivation at work is key here. On the other hand, individual coaching for such issues as burnout, absenteeism, work-related goal setting, and talent development are becoming ever more business oriented. In these areas, it helps to have insight in organizational and strategic topics, as these may inform appropriate solutions for individual employee cases.

In focusing on research at the interface between strategic HRM and work psychology I am certainly aware of the complexities involved. At the organizational end context is complex, and it is impossible to reduce such complexity to a standard checklist of environmental factors and/or HR-practices (Thompson, 2007). Similarly, at the individual employee end, it is impossible to reduce individual context to a standard checklist of work experience factors. The individual work-related biography usually shows periods of stability, but certainly also periods of deadlocks and unexpected turns (Bruner, 2004). Finally, the process relating strategic HRM to organizational performance is not easily reduced to a single mechanism, like the one via job demands/resources and discretionary effort that I have focused on today. The “bottom of the tub” quite probably contains several variants (Peccei, van de Voorde en van Veldhoven, in press). Something similar -by analogy- could probably apply to the “roof of the tent”. However, like for any other model, the value of the models presented here partially lies also in their simplicity.

**Word of thanks** Having arrived at the end of my lecture, I would like to say a couple of words of thanks.

First of all, my thanks goes to the rector magnificus and the board of governors of the university, as well as to the dean and the tenure and senior committee of the School of Social and Behavioral Sciences for appointing me as full professor of Work, Health and Well-being. I would also like to thank the three national and three international referents for their contribution in the appointment procedure.

The road towards this day has been a long one. It is over 30 years ago that I entered this university as a student. Ever since I have been lucky to meet many people that have stimulated my development to where I am today. It is impossible to thank each and every one of them, but I would like to mention explicitly and in historical order: Stan Maes, Jos van Collenburg, Philip Koster van Groos, Rick Fortuin, Theo Meijman, Frank van Dijk, Ludo Daems, and Jacques Hagenaaers. Thank you for all the opportunities, personal attention and support. In more recent years, Jaap Pauwe has fulfilled a similar role, and importantly he has also supported me in the formal steps towards this appointment. Dear Jaap, thank you very much for this. In addition, I learn a lot from our collaboration. In line

with this you also provided valuable comments on an earlier version of this inaugural lecture, thanks.

An overview of my publications will tell you that I collaborate with many colleagues in my research, I seldom work alone. I therefore owe a lot of thanks to the authors and co-authors that I collaborate with. Thanks a lot for your creativity, openness and persistence. I would like to continue our collaboration along similar lines in the future.

Until about five years ago, my orientation in research was mostly national. Since then it has become more international, and I collaborate especially with researchers in the UK. A special word of thanks to the researchers that I met during a longer visit at King's College London in 2007 and who have played an important role in making my orientation more international. Thanks Riccardo Peccei, David Guest and Philip Dewe. On a similar note: since a couple of years I work as an associate editor for the Journal of Occupational and Organizational Psychology. This has proven to be a very informative task. A special thanks to Jan de Jonge for asking me on board.

For the past 15 years I collaborate with a research and consultancy office in Amsterdam, called SKB. It is a luxury to be able to work with data from practice which have been collected, coded and analyzed with so much care. Jan Prins and Lyan Dijkstra are the directors at SKB. Jan and Lyan, thanks for your wonderful collaboration and support through the years.

The department of Human Resource Studies has been my workplace for the last 10 years. Dear colleagues and former colleagues of the department, I thank you all for a warm nest and the positive atmosphere during teaching as well as research. It is a pleasure to work with you. Thanks for introducing me to the area of HRM research.

The kind of topic that I work on implies that I share a lot of interests with other groups in this faculty, for instance with work- and organizational psychology, social psychology, health psychology, personality psychology, organization sciences, sociology, as well as methods and statistics. With some of the researchers in these groups I have already had the pleasure to collaborate, and I look forward to continuing this in the future.

Over the past 10 years I have become ever more involved in the Faculty of Social and Behavioral Sciences as an organization. Behind the scenes a lot of hard work is done to make this organization what it is, in teaching, in exams, in research. It is great to be a part of all this activity. Thanks.

A special thanks to all my students. Thanks for your interest and trust. A major part of my teaching consists of supervising students preparing their master thesis or PhD thesis, and this is a task that gives me a lot of energy. Thanks especially to Luc, Karina, Susanne, Josette and Susan. Your PhD research is a strong incentive to think about and actually work on the issues that have been discussed in this lecture.

Words are not enough to thank my parents, Jan and Leny, for their support through the years. Mom and dad, a warm thanks to you. The word support needs to be understood in a very practical way also, because this inaugural lecture was written -for a considerable part- at home with my parents. I hope the result matches the excellent catering and good company I enjoyed there.

Many thanks also to you, Marjolein, Jeroen and Hanne. Here stands a proud father. Proud of his work, but even more proud of you. Having a father who is a researcher is probably not always the nicest option: at the university, on conferences, at home behind the computer, I am quite often “occupied”. Thanks a lot for the space that I get from you to do my work.

Carla, I am allowed to say “my wife” nowadays. Like no other person you have seen my progress towards this day from nearby. An external PhD partially on top of my job at the occupational health service, a switch from my own consultancy business to the university, papers accepted, papers rejected, and everything else that goes with a university job. Thanks for supporting me to do all this without ignoring yourself. More importantly: you really help me to keep seeing things in perspective. You also commented on an earlier version of this text, as well as helped me in so many practical ways with my preparations for today. A big thanks to you, Carla, and a big wink.

Finally, a word to everyone present here today: thank you for your attention and for your attendance.

***I have said.***

# References



- Abell, P., Felin, T. & Foss, N. (2008). Building micro-foundations for the routines, capabilities, and performance links. *Managerial and decision economics*, 29, 489-502.
- Akerboom, S. & Maes, S. (2006). Beyond demand and control: the contribution of organizational risk factors in assessing the psychological well-being of health care employees. *Work & Stress*, 20(1), 21-36.
- Appelbaum, E., Bailey, T., Berg, P. & Kalleberg, A. (2000). *Manufacturing advantage: Why high performance work systems pay off*. New York: Cornell University Press.
- Arnold, J., Silvester, J., Patterson, F., Robertson, I., Cooper, C. & Burnes, B. (2010). *Work psychology. Understanding human behaviour in the workplace. 4th Edition*. Harlow: Prentice Hall.
- Asimov, I., (1951). *I Robot*. New York: Gnome Press.
- Baane, R., Houtkamp, P., & Knotter, M., (2010). *Het nieuwe werken ontrafeld: over bricks, bytes & behavior [Unraveling the new ways of working: about bricks, bytes and behavior]*. Assen: Van Gorcum.
- Bakker, A., & Demerouti, E., (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309-328.
- Bakker, A., van Veldhoven, M., & Xanthopoulou, D., (2010). Beyond the Demand-Control Model: thriving on high job demands and resources. *Journal of Personnel Psychology*, 9(1), 3-16.
- Beckers, D., van der Linden, D., Smulders, P., Kompier, M., van Veldhoven, M., & van Yperen, N., (2004). Working overtime hours: relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine*, 46(12), 1282-1289.
- Beijer, S., Farndale, E., van Veldhoven, M., Hope-Hailey, V., & Kelliher, C., (under review). An empirical examination of the distinctiveness of employee engagement measures: testing a four-fold typology.
- Biron, M., & van Veldhoven, M., (in press). Emotional labor in service work: psychological flexibility and emotion regulation. *Human Relations*.
- Bolk, H., & van Veldhoven, M., (2001). *Handboek aanpak werkdruk in de GGZ. Methodische benadering en monitor [Handbook for the management of work pressure in mental health care. Methods and monitor]*. Amsterdam: SKB.
- Bolton, S. & Houlihan, M. (2007). *Searching for the Human in Human Resource Management: Theory, Practice and Workplace Contexts*. London: Palgrave Macmillan.
- Bond, F., Flaxman, P., van Veldhoven, M., & Biron, M., (2010). The impact of psychological flexibility and acceptance and commitment therapy (ACT) on health and productivity at work. In: Houdmont, J. & Leka, S. (Eds.). *Contemporary occupational health psychology: global perspectives on research and practice (Vol. 1)*. Chichester, England: Wiley-Blackwell. pp. 296-313.



- Boswell, W., (2006). Aligning employees with the organization's strategic objectives: out of 'line of sight', out of mind. *International Journal of Human Resource Management*, 17, 1489-1511.
- Bowen, D., & Ostroff, C., (2004). Understanding HRM-firm performance linkages: the role of the "strength" of the HRM system. *Academy of Management Review*, 29, 203-221.
- Boxall, P., & Macky, K., (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human Resource Management Journal*, 19(1), 3-23.
- Boxall, P., & Purcell, P., (2011). *Strategy and human resource management. (third edition)*. Basingstoke: Palgrave Macmillan.
- Broersen, S., de Zwart, B., van Dijk, F., Meijman, T., & van Veldhoven M., (1996). Health complaints and experienced working conditions in relation to work and age. *Occupational and Environmental Medicine*, 53, 51-57.
- Bourdeaud'hui, R., Janssens, F., & Vanderhaeghe, S., (2004). *Nulmeting Vlaamse werkbaarheidsmonitor*. Indicatoren voor de kwaliteit van de arbeid op de Vlaamse arbeidsmarkt 2004 [Baseline measure for the Flemish work ability monitor. Indicators for the quality of work in the Flemish labor market 2004]. Brussels: SERV/STV.
- Cavanaugh, M., Boswell, W., Roehling, M., & Boudreau, J., (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology*, 85, 65-74.
- Chadwick, C., & Dabu, A., (2009). Human resources, human resource management, and the competitive advantage of firms: toward a more comprehensive model of causal linkages. *Organization Science*, 20(1), 253-272.
- Coff, R., & Kryscynski, D., (2011). Drilling for the micro-foundations of human-capital based competitive advantages. *Journal of Management*, 37, 1429-1443.
- Coleman, J., (1990). *Foundations of social theory*. Cambridge: Harvard University Press.
- Croon, M., & van Veldhoven, M., (2007). Predicting group level outcome variables from variables measured at the individual level: a latent variable multilevel approach. *Psychological Methods*, 12(1), 45-57.
- Deci, E., & Ryan, R., (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum press.
- De Jonge, J., Dormann, C., (2003). The DISC-model: Demand-Induced Strain Compensation mechanisms in Job Stress. In: Dollard, M., Winefield, A., & Winefield, H., (Eds.), *Occupational Stress in the Service Professions* (pp. 43-74). London: Taylor & Francis.
- De Witte, H., Vets, C., & Notelaers, G., (2010). *Werken in Vlaanderen: vermoeiend of plezierig? Resultaten van 10 jaar onderzoek naar de beleving en beoordeling van de*

arbeid [Working in Flanders: tiring or pleasant? Results of 10 years of research on the experience and evaluation of work]. Leuven: Acco.

- Delery, J., & Shaw, J., (2001). The strategic management of people in work organizations: review, synthesis, and extension. *Research in Personnel and Human Resources Management, 20*, 165-197.
- Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W., (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*, 499-512.
- Dorenbosch, L., (2009). *Management by Vitality*. Dissertation. Tilburg University.
- Drenth, P., & Thierry, H., (1998). *Handbook of Work and Organizational Psychology (Vol. 2)*. Hove: Psychology Press.
- Fleetwood, S., & Hesketh, A., (2007). HRM-performance research: under-theorised and lacking explanatory power. *International Journal of Human Resource Management, 17*, 1977-1993.
- Geurts, S., (2011). "In time out of office": over herstel van werk en werkstress. Oratie. [In time out of office: about recovery from work and work stress. Inaugural lecture]. Radboud Universiteit Nijmegen.
- Gittel, J., (2001). Organizing work to support relational coordination. *International Journal of Human Resource Management, 11(3)*, 517-539.
- Gittel, J., Weinberg, D., Bennett, A., & Miller, J., (2008). Is the doctor in? A relational approach to job design and the coordination of work. *Human Resource Management, 47(4)*, 729-755.
- Gittel, J., Seidner, R., & Wimbush, J., (2010). A relational model of how high-performance work systems work. *Organization Science, 21(2)*, 299-311.
- Grant, A., Christianson, M., & Price, R., (2007). Happiness, health, or relationships? Managerial practices and employee well-being trade-offs. *Academy of Management Perspectives, 21(3)*, 51-63.
- Guest, D., (2011). Human resource management and performance: still searching for some answers. *Human Resource Management Journal, 21*, 3-13.
- Hooftman, W., Koppes, L., De Vroome, E., Kraan, K., Driessen, M., & Van den Bossche, S., (2011). *NEA 2010: Vinger aan de pols van werkend Nederland [National working conditions survey 2010: monitoring workers in the Netherlands]*. Hoofddorp: TNO Arbeid.
- Hubert, A., & Veldhoven, M. van (2001). Risk sectors for undesirable behaviour and mobbing. *European Journal of Work and Organizational Psychology, 10(4)*, 415-424.
- Humphrey, S., Nahrgang, J., & Morgeson, F., (2007). Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92*, 1332-1356.

- Karasek, R., (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-308.
- Karasek, R., & Theorell, T., (1990). *Healthy work*. New York: Basic Books.
- Kompier, M., Taris, T., & van Veldhoven, M., (in press). Tossing and turning: insomnia in relation to occupational stress, rumination, fatigue and well-being. *Scandinavian Journal of Work and Environmental Health*.
- Kroon, B., van de Voorde, K., & van Veldhoven, M., (2009). Cross-level effects of high performance work practices – two counteracting mediating mechanisms compared. *Personnel Review*, 38(5), 509-525.
- Legge, K., (1995). *Human Resource Management: Rhetorics and Realities*. Macmillan: Basingstoke, London.
- Lepak, D., Liao, H., Chung, Y., & Harden, E., (2006). A Conceptual Review of Human Resource Management Systems in Strategic Human Resource Management Research. *Research in Personnel and Human Resources Management*, 25, 217-271.
- Lepine, J., Lepine, M., Jackson, C., (2004). Challenge and hindrance stress: relationships with exhaustion, motivation to learn, and learning performance. *Journal of Applied Psychology*, 89, 883-891.
- Levitt, S., & Dubner, S., (2006). *Freakonomics*. Penguin Books: London.
- Malone, T., & Crowston, K., (1994). The interdisciplinary study of coordination. *ACM Computing Surveys*, 26, 87-119.
- Meijman, T., (1989). Belasting en herstel: een begrippenkader voor arbeidspsychologisch onderzoek van werkbelasting [Effort and recuperation: a conceptual framework for psychological research of workload]. In: T., Meijman (Ed.), *Mentale Belasting en Werkstress: een Arbeidspsychologische Benadering [Mental Workload and Job Stress: a Work Psychological Approach]* (pp. 5-20). Assen/Maastricht: Van Gorcum.
- Mohren, D., Jansen, N., van Amelsvoort, L., & Kant, IJ., (2007). *An epidemiological approach of fatigue at work. Experiences from the Maastricht Cohort Study*. Maastricht: Maastricht University.
- Nishii, L., Lepak, D., & Schneider, B., (2008). Employee attributions of the “why” of HR practices: their effects on employee attitudes and behaviors, and customer satisfaction. *Personnel Psychology*, 61, 503-545.
- Nishii, L., & Wright, P., (2008). Variability within organizations: Implications for strategic human resource management. In Smith, D., (Ed.). *The people make the place: Dynamic linkages between individuals and organizations*. New York: Taylor & Francis.
- Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D., (2010). Diary studies in organizational research: an introduction and some practical recommendations. *Journal of Personnel Psychology*, 9(2), 79-93.

- 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, 129-142.
- Parent-Thirion, A., Fernández Macías, E., Hurley, J., & Vermeylen, G., (2007). *Fourth European Working Conditions Survey*. Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Peccei, R., (2004). *Human resource management and the search for the happy workplace*. Inaugural address. Rotterdam: Erasmus Research Institute of Management (ERIM).
- Peccei, R., van de Voorde, K., & van Veldhoven, M., (in press). HRM, performance and wellbeing. In: Guest, D., Paauwe, J., & Wright, P., (Eds). *Managing people and performance*. Chichester: Wiley-Blackwell.
- Pfeffer, J., (1994). *Competitive advantage through people: unleashing the power of the work force*. Cambridge: Harvard Business School Press.
- Schalk, R., van der Heijden, B., de Lange, A., & van Veldhoven, M., (2011). Long-term developments in individual work behaviour: Patterns of stability and change. *Journal of Occupational and Organizational Psychology*, 84(2), 215-227.
- Schalk, R., van Veldhoven, M., et al. (2010). Moving European research on work and ageing forward: overview and agenda. *European Journal of Work and Organizational Psychology*, 19(1), 76-101.
- Schaufeli, W., & Bakker, A., (2007). *De psychologie van arbeid en gezondheid (2<sup>e</sup> herziene druk) [The psychology of work and health (2<sup>nd</sup> revised edition)]*. Houten: Bohn Stafleu van Loghum.
- Schneider, B., (1987). The people make the place. *Personnel Psychology*, 40(3), 437-453.
- Schyns, B., & van Veldhoven, M., (2010). Group leadership climate and individual organizational commitment: a multi level analysis. *Journal of Personnel Psychology*, 9(2), 57-68.
- Schyns, B., van Veldhoven, M., & Wood, S., (2009). Organizational climate, relative psychological climate and job satisfaction: the example of supportive leadership climate. *Leadership & Organization Development Journal*, 30(7), 649-663.
- Smulders, P., & Houtman, I., (2004). Oorzaken en effecten van werkdruk: eenc exploratief Onderzoek [Causes and effects of work pressure: an explorative study]. *Tijdschrift voor Arbeidsvraagstukken [Journal of Labor Market Issues]*, 20(1), 90-106.
- Snape, E., & Redman, T., (2010). HRM practices, organizational citizenship behavior, and performance: a multi-level analysis. *Journal of Management Studies*, 47(7), 1219-1247.
- Sonnentag, S., & Fritz, C., (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology*, 12, 204-221.

- Sonnentag, S., Perrewé, P., Ganster, D., (2009). Current perspectives in job-stress recovery. *Research in occupational stress and well-being. Volume 7*. Bingley: JAI press.
- Thompson, M., (2007). Innovation in work practices: a practice perspective. *International Journal of Human Resource Management*, 18(7), 1298-1317.
- Van Daalen, G., Sanders, K., Willemsen, T., & van Veldhoven, M., (2009). Exhaustion and mental health problems among employees doing “people work”: the impact of job demands, job resources, and family-to-work conflict. *International Archives of Occupational and Environmental Health*, 82(3), 291-303.
- Van de Voorde, K., Paauwe, J., & van Veldhoven, M., (2010). Predicting business unit performance using employee surveys: monitoring HRM-related changes. *Human Resource Management Journal*, 20(1), 44-63.
- Van de Voorde, K., Paauwe, J., & van Veldhoven, M., (in press). Employee well-being and the HRM-organizational performance relationship: a review of quantitative studies. *International Journal of Management Reviews*.
- Van de Voorde, K., van Veldhoven, M., & Paauwe, J., (2010). Time precedence in the relationship between organizational climate and organizational performance: a crosslagged study at the business unit level. *International Journal of Human Resource Management*, 21(10), 1712-1732.
- Van den Bossche, S., & Smulders, P., (2003). *Nationale enquête arbeidsomstandigheden 2003: methodologie en globale resultaten [National working conditions survey 2003: methods and global results]*. Hoofddorp: TNO Arbeid.
- Van Der Doef, M., & Maes, S., (1999). The Job Demand-Control (-Support) model and psychological well-being: A review of 20 years of empirical research. *Work & Stress*, 13, 87-114.
- Van der Heijden, B., Schalk, R., & van Veldhoven, M., (2008). Ageing and careers: European research on long-term career development and early retirement. *Career Development International*, 13(2), 85-94.
- Van der Hulst, M., van Veldhoven, M., & Beckers, D., (2006). Overtime and need for recovery in relation to job demands and job control. *Journal of Occupational Health*, 48(1), 11-19.
- Van Gelderen, B., Heuven, E., van Veldhoven, M., Zeelenberg, M., & Croon, M., (2007). Psychological strain and emotional labor among police officers: a diary study. *Journal of Vocational Behavior*, 71(3), 446-459.
- Van Veldhoven, M., (1996). *Psychosociale arbeidsbelasting en werkstress* (proefschrift) [Psychosocial workload and job stress (PhD thesis)]. Lisse: Swets & Zeitlinger.
- Van Veldhoven, M., (2001). *Te moe voor het paradijs. Werkstress: tussen weten en doen* [Too tired for paradise. Job stress: between knowing and doing]. Leuven: Acco.

- Van Veldhoven, M., (2005). Financial performance and the long-term link with HR practices, work climate and job stress. *Human Resource Management Journal*, 15(4), 30-53.
- Van Veldhoven, M., (2008). Need for recovery after work: An overview of construct, measurement and research. In: Houdmont, J., & Leka, S., (Eds.), *Occupational health psychology: European perspectives on research, education and practice. Volume III*. Nottingham: Nottingham University Press. (pp 1-25).
- Van Veldhoven M., & Beijer S., (in press). Gender differences in the job-related stress process: does private life context make a difference? *Journal of Social Issues*.
- Van Veldhoven, M., & Broersen, S., (2003). Measurement Quality and Validity of the Need for Recovery Scale. *Occupational and Environmental Medicine*, 60 (Suppl 1), i3-19.
- Van Veldhoven, M., Broersen, S., & Fortuin, R., (1999). *Werkstress in Beeld: psychosociale arbeidsbelasting en werkstress in Nederland [Job stress in figures: psychosocial workload and job stress in the Netherlands]*. Amsterdam: SKB.
- Van Veldhoven, M., Debats, S., & Dorenbosch, L., (2009). Oordelen over de effectiviteit van HRM: een onderzoek onder HR managers, lijnmanagers en werknemers [Perceptions of HR effectiveness: a study among HR managers, line managers and employees]. *Tijdschrift voor Arbeidsvraagstukken [Journal of Labor Market Issues]*, 25(2), 186-200.
- Van Veldhoven, M., de Jonge, J., Broersen, S., Kompier, M., & Meijman, T., (2002). Specific relationships between psychosocial job conditions and job-related stress: A three-level analytic approach. *Work and Stress*, 16(3), 207-228.
- Van Veldhoven, M., Dijkstra, L., & Broersen, S., (2003). *Werkdruk en werkstress in het bankwezen. Nulmeting 1998/1999 en 2002 [Work pressure and job stress in the banking sector. Baseline measure 1998/1999 and 2002]*. Hoofddorp/Amsterdam (TNO Arbeid/ SKB).
- Van Veldhoven, M., & Dorenbosch, L., (2008). Age, proactivity and career development. *Career Development International*, 13(2), 112-131.
- Van Veldhoven, M., & Meijman, T., (1994). *Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA) [Measuring psychosocial workload with a survey: the questionnaire on the experience and evaluation of work (QEEW)]*. Amsterdam: NIA.
- Van Veldhoven, M., Meijman, T., Broersen, S., & Fortuin, R., (1997). *Handleiding VBBA [Manual QEEW]*. Amsterdam: SKB.
- Van Veldhoven, M., & Sluiter, J., (2009). Work-related recovery opportunities: testing scale properties and validity in relation to health. *International Archives of Occupational and Environmental Health*, 82, 1065-1075.

- Van Veldhoven, M., Taris, T., de Jonge, J., & Broersen, S., (2005). The relationship between work characteristics and employee health and well-being: how much complexity do we really need? *International Journal of Stress Management*, 12(1), 3-28.
- Veld, M., (2012). *HRM, strategic climate and employee outcomes in hospitals: HRM care for cure?* Dissertation. Erasmus University Rotterdam/Tilburg University.
- Verdonk, P., Boelens, L., van Veldhoven, M., Koppes, L., & Hooftman, W.,(2010). Work-related fatigue: the specific case of highly educated women in the Netherlands. *International Archives of Occupational and Environmental Health*, 83, 309-321.
- Ybema, J., Smulders, P., (2002). Emotionele belasting en de noodzaak tot het verbergen van emoties op het werk [emotional workload and the necessity of hiding emotions at work]. *Gedrag en Organisatie [Behavior and Organization]*, 15(3),129-146.
- Wagenaar, W., Hudson, P., & Reason, J., (1990). Cognitive failures and accidents. *Applied Cognitive Psychology*, 4, 273-294.
- Wiezer, N., Smulders, P., & Nelemans, R., (2005). De invloed van organisatiekenmerken op werkdruk in organisaties [The influence of organizational characteristics on work pressure in organizations]. *Tijdschrift voor Arbeidsvraagstukken [Journal of Labor Market Issues]*, 21(3), 228-244.
- Wood, S., van Veldhoven, M., Croon, M., & De Menezes, L., (in press). Enriched job design, high involvement management and organizational performance: the mediating roles of job satisfaction and well-being. *Human Relations*.
- Wright, P., & McMahan, G., (2011). Exploring human capital: putting the human back into strategic human resource management. *Human Resource Management Journal*, 21, 93- 104.

# Colophon

*graphic design*

Beelenkamp Ontwerpers, Tilburg

*cover photography*

Ton Toemen

*print*

PrismaPrint, Tilburg University