Summary

Introduction

Chapter 1 is the general introduction of this thesis, which aims to gain insight in factors that contribute to a strong workforce providing care to people with dementia in long-term-care facilities. A strong workforce is essential to develop a comprehensive and high quality long-term-care system for this group. This has been emphasised by the World Health Organisation, policy makers, patients' associations and researchers.

Gaining insight into factors that contribute to a strong workforce is particularly important given the challenges facing long-term care for people with dementia. First, the number of people with dementia is increasing rapidly and the number of people of working age is declining at the same time. Second, the work of healthcare workers in nursing homes is known to include high levels of workload. Finally, the role of the workforce is increasingly important as the approach in long-term care is shifting from the traditional medical models towards more person-centred approaches to care in which the relationships and interactions between staff and residents are crucial. As a consequence, recruiting, retaining and training healthcare workers in long-term-care facilities for people with dementia are main concerns of policy makers and employers in the upcoming years.

The thesis consists of two general parts. The first part (Chapters 3 – 5) aims to obtain insight into factors that contribute to a healthy work environment in long-term care facilities for people with dementia. This part is based on Job Demand-Control-Support (DCS) Model. The second part (Chapters 6 – 7) focuses in more detail on the person-centred approach. This part uses the theory of person-centred care described by Kitwood as a starting point, and is aimed at gaining insight in how person-centredness is related to healthcare workers' and residents' well-being. The specific relationships studied are schematically presented in Figure 1 (part 1) and Figure 2 (part 2) in the general introduction of this thesis. Data were used from the first measurement cycle (November, 2008 and May, 2009) of the Living Arrangements for people with Dementia study (LAD-study; Monitor Woonvormen Dementie in Dutch) on 136 long-term-care facilities, as well as from an in-depth study of nine participating facilities of the LAD-study (2009-2010).

Methods

Chapter 2 describes the design of the *Living Arrangements for people with Dementia study (LAD-study)*. The LAD-study is an ongoing monitoring study of the developments and variety in Dutch nursing home care for people with dementia. The first measurement cycle, from which data is used in this thesis, took place from November, 2008 to May, 2009. In all of the 136 long-term-care facilities, surveys were filled out by healthcare workers on their job characteristics and job-related well-being, observational questionnaires were filled out by healthcare workers about residents, a manager was interviewed, and finally registrations on the use of physical restraints and psychotropic drugs were investigated. An in-depth study was conducted in ten facilities – both high and low scoring facilities on the primary LAD-study outcomes – to gain more insight into facilitators and barriers of high-quality dementia care using Dementia Care Mapping, among others (December, 2009 – March, 2010).
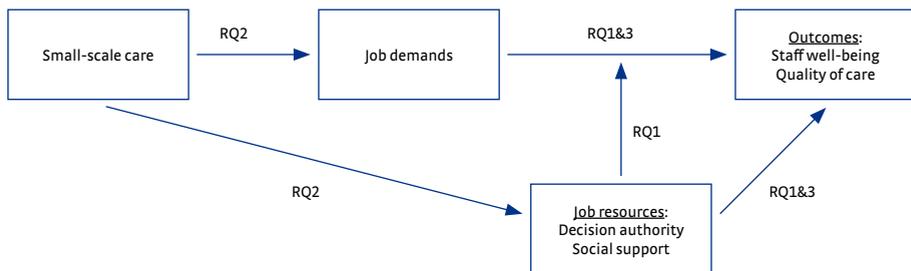
Part 1

Figure 1. Schematic presentation of research questions from the first part of this thesis.

Chapter 3: Do job resources (i.e., decision authority, and workplace social support) reduce (buffer) the adverse effect of high job demands on staff well-being and activate the positive effects of high job demands on staff's feelings of competence?
We studied if high levels of decision authority, coworker and supervisor support reduce or *buffer* the detrimental impact of high job demands on staff well-being and create positive consequences *(activate)* when job demands are high. The Job Demand-Control-Support (DCS) Model was used as a base to study these relationships. Hierarchical multilevel regression analyses were performed studying the

moderation that is hypothesised in this model in a sample of 1,147 staff members. Moderation was statistically represented by three-way interactions (demands x authority x support), while lower-order effects were also taken into account (two-way interactions and main effects). Job satisfaction, emotional exhaustion and personal accomplishment were the dependent variables used for staff well-being. Decision authority was found to buffer the adverse effect of job demands; two-way interaction effects were found between job demands and decision authority for job satisfaction and emotional exhaustion. Supervisor support was found to buffer the adverse effect of job demands on emotional exhaustion in situations with low decision authority (three-way interaction). Not much proof was found for the activating hypothesis of the DCS Model; we did not find the hypothesised three-way interaction effect for personal accomplishment. However, we did find a three-way interaction for personal accomplishment showing that coworker support had an adverse effect on personal accomplishment in high strain situations. Given the results, it can be concluded that decision authority especially makes healthcare workers in nursing homes less vulnerable to adverse effects of high job demands, and also promotes positive consequences of work (personal accomplishment).

Chapter 4: In what way is small-scale care related to staff's job characteristics – job demands, decision authority, coworker support, and supervisor support?
Limited research has been conducted to gain insight into how new care models that are more resident-oriented and directed towards small-scale and homelike environments influence healthcare staff's work environment. We studied how two indicators of small-scale care in long-term-care facilities providing nursing home care for people with dementia (i.e., small-scale care characteristics and total number of residents with dementia in facility) are associated with staff's perceived job characteristics (i.e., job demands, decision authority, coworker and supervisor support). Multilevel regression analyses were used which were adjusted for staff, residents, and facilities characteristics when needed. Data were derived from a sample of 136 long-term-care facilities in which 1,327 residents and 1,147 staff participated. Results showed that both indicators of small-scale care were negatively associated with job demands; staff perceived less time and work pressure as (1) more characteristics of small-scale care were integrated and (2) the facility had fewer residents with dementia in total. One indicator was positively associated with decision authority. As more characteristics of small-scale care were integrated, staff's perceived decision authority was higher. No relationships were found with coworker and supervisor support. Knowing that job demands and decision authority are important

predictors of job appraisal and well-being, our findings indicate that small-scale care could have a beneficial impact on the work environment.

Chapter 5: What is the relationship between job characteristics and the prescription of physical restraints and psychotropic drugs?
In the fourth empirical study, we tested the hypothesis that more psychotropic drug and restraint use in nursing home care for people with dementia is associated with higher nursing staff's job demands, lower decision-authority and lower social support. Insight into predictors of psychotropic drug and restraint use is needed to decrease its usage. Data on the prescription of psychotropic drugs and physical restraints from 111 long-term-care facilities with a total of 4,796 residents were used. In addition, survey data of a sample of 996 staff working in these arrangements and 1,138 residents were considered. Results from logistic regression analyses showed that more supervisor support was associated with less prescription of benzodiazepines. Furthermore, coworker support was related to lower prescription of deep chairs. No significant relations were found for job demands and decision authority. In general, findings indicate that nursing staff's job characteristics were scarcely related to the prescription of psychotropic drugs and physical restraints. This finding indicates that in facilities with characteristics of an unhealthy work environment for nursing staff, one is not more likely to prescribe drugs or restraints. Furthermore, our findings again show that the prescription of psychotropic drugs and physical restraints vary extensively across facilities, and there are still facilities where nearly every resident receives one or more types of psychotropic drugs or physical restraints.
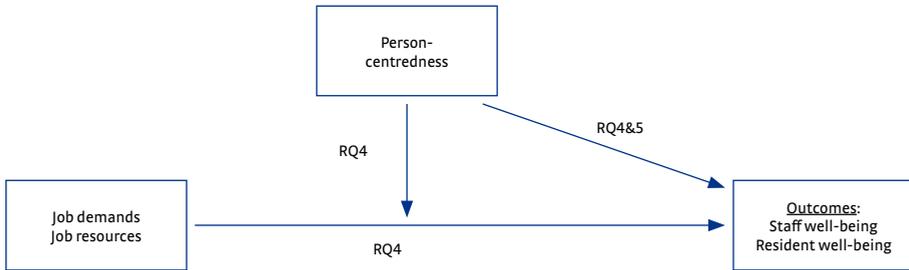
Part 2

Figure 2. Schematic presentation of research questions from the second part of this thesis.

Chapter 6: What is the role of the staff's person-centredness towards people with dementia in relation to the characteristics of their work environment and staff's job-related well-being?

Given the development towards person-centred care and labour force issues, research has recently focused on the effect of person-centredness on nursing staff's well-being. This empirical study explored the role of nursing staff's person-centredness caring for people with dementia in relation to their work environment and job-related well-being (n=1,147). Findings from occupational stress research suggest that employees' personal characteristics, such as their person-centredness, can moderate the impact particular job characteristics have on their job-related well-being. This means that there could be particular job characteristics that nursing staff with a strong person-centred attitude in particular need and benefit from. Hierarchical multilevel regression analyses were used to study both the main effect of person-centredness and its possible moderating effect (two-way interaction effects). The conclusion is that nursing staff's person-centredness seems to play a modest role in relation to job characteristics and job-related well-being. As seen in other studies focusing on both personal and job characteristics, the relationship between job characteristics and job-related well-being was much stronger. However, findings do indicate that person-centredness is positive for nursing staff themselves, especially when they feel supported by their supervisor. Person-centredness was found to moderate the relationship between coworker support and three outcomes of job-related well-being, as well as between supervisor support and two of these outcomes. For highly person-centred nursing staff, coworker support was found to have a weaker impact and supervisor support to have a stronger impact on their job-related wellbeing. In addition, direct effects showed that

person-centredness was associated with greater job satisfaction, more emotional exhaustion and more strongly with more personal accomplishment.

Chapter 7: To what extent do staff address or undermine residents with dementia's psychological needs through their interactions and how is this associated with residents' well-being?

The final study explored the extent to which staff-resident interactions address or undermine residents' psychological needs (i.e., comfort, occupation, identity, attachment, and inclusion) and how such interactions are associated with residents' well-being using data on staff-resident interactions and residents' well-being. Insight into these relationships will help us to focus training in person-centred dementia care in order to achieve optimal residents' well-being. Data were assessed using Dementia Care Mapping (DCM) in nine long-term-care facilities including observations of 51 residents. DCM yields a count and transcripts of staff-resident interactions that are addressing (personal enhancers - PEs) or undermining (personal detractions - PDs) residents' psychological needs, and every five minutes scores each residents' mood and engagement (ME) value. The relationship between PEs, PDs and well-being was analysed by studying residents' ME values before and after a PE or a PD occurred. We found that the most common PEs were those addressing comfort and occupation. Yet after PEs that addressed residents' need for identity, attachment and inclusion, residents' well-being increased most often. The most common PDs were those which undermined the needs for occupation, comfort and inclusion. Residents' well-being decreased most often after PDs that undermined the need for comfort. Results indicate that residents' well-being could possibly be improved by increasing interactions, which address residents' need for identity, attachment, and inclusion, and by a focus on eliminating interactions undermining residents' need for comfort. Regarding occupation, staff could positively affect residents' functioning and well-being in the long run by recognizing the relatively frequently occurring missed opportunities to empower and facilitate residents.

Discussion

Chapter 8 is the general discussion of this thesis. The five studies are summarised and connected for all four job characteristics and person-centredness. In addition, the methodological consequences of using data from the LAD-study are discussed. Using data from this monitoring study has some important strengths and limitations. The most important strength is the broad scope of the LAD-study, which enabled the use of advanced statistics, studying complex interactive relationships, studying relations between variables obtained from different sources, and adjusting the analyses for different types of cofounders from different sources. Limitations, for example, are the cross-sectional nature of the data, the possible common method variance resulting from the use of self-report questionnaires in the LAD-study, and robustness of the interaction effects found.

The chapter ends with implications for both practice and research. Implications for practice are:
- Diminish the hierarchical nature of nursing home care to improve staff's well-being.
- Invest in supervisors to improve staff well-being and quality of care.
- Reflecting on, and adapting the concept of care to prevent or reduce high strain.
- Provide training and coaching regarding person-centred care to improve residents' well-being.

Implications for future research are:
- Studying a greater scope of job demands and job resources in a broader theoretical framework.
- Studying the impact and implementation of self-managed work teams.
- Studying investments in supportive leaders and the effects of leadership styles.
- Studying the impact of person-centred care and its implementation.
- Performing ongoing monitoring studies in dementia care.

To conclude, the results of this thesis indicate that a broad approach that focuses on staff, supervisors, as well as organization of care is needed to further improve the quality of care in long-term-care facilities for people with dementia.