

Eindhoven, August 2012

**The test and evaluation of a job
crafting intervention in healthcare**

by

Jeanine van Mersbergen

BSc Industrial Engineering and Management Science –TU/e

Student identity number 0618267

in partial fulfilment of the requirements for the degree of

**Master of Science
in Innovation Management**

Supervisors:

Prof.dr. E. Demerouti, TU/e, HPM

Prof.dr. J. de Jonge, TU/e, HPM

Supervisor Elkerliek hospital:

H. van de Ven, department manager Geriatrics

O. Kee, sectormanager

TUE. School of Industrial Engineering.
Series Master Theses Innovation Management

Subject headings: job demands, job resources, crafting work, intervention, health care,
nurses

Abstract

Elkerliek hospital Helmond is an organization which is working on their processes to stay ahead of competitors. Employees of the Elkerliek, especially the nurses, are being confronted with changes in their work processes. Response to change is a facet of performance which is called adaptive performance (Shoss, Witt, & Vera, 2011). In the Elkerliek, a new program is being introduced and the goal of the program is to prevent patients older than 70 years from unnecessary function loss during a hospital stay by screening. In this study a job crafting intervention will be investigated to increase the adaptive performance of nurses, so they better perform on the new program. Job crafting consists of changing job resources and job demands, and this is expected to result in higher well-being (i.e. higher work engagement, lower disengagement and more positive emotions) and adaptive performance. The research method which will be used is a nonrandomized control group pretest-posttest design. The intervention consists of training a personal crafting plan, which is implemented in the course of three weeks after the training. In conclusion a job crafting intervention can be used as a tool to increase nurses' adaptive performance and well-being at work. This is very important in a competitive market, where organizations face many changes to optimize their processes. The most important aspect of job crafting is increasing job resources, which is causing most of the changes in adaptive performance and well-being, which were found. It plays an important role in work experience for nurses. For organizations, it will be important to provide increasing job resources as a tool and managers must be aware of stimulating this behavior.

Preface

This study is the result of my graduation project for the Master program Innovation Management at the Human Performance Capacity group. It is partly conducted at the Elkerliek hospital Helmond and partly at Eindhoven, University of Technology (TU/e). During my BSc Industrial Engineering and Management Science for Healthcare, I developed my interest for healthcare and the human aspect of innovation management. Job crafting as an intervention is a relative new topic in scientific literature and therefore it has theoretical and practical relevance. It cost a lot of time and hard work, but I really enjoyed working on this study.

This would not have been possible without the input of the supervisors of Eindhoven University of Technology. First of all, I would like to thank my first supervisor Prof.dr. Eva Demerouti for her valuable insights and support during the project. I would also like to thank my second supervisor Prof.dr. Jan de Jonge, for his useful feedback on my study. Furthermore, I would like to thank people from Elkerliek hospital Helmond. My thanks go to Hans van de Ven, who was my supervisor at Elkerliek and always made time for answering my questions and supported me during my project. I would also like to thank Olav Kee, who is the initiator of the project and showed his interest in the project. Next my thanks go to Yvonne Boudewijns, who reviewed my study. Furthermore, I would like to thank all other involved people of the hospital, like department managers and nurses, for their cooperation.

Finally, my thanks go to my boyfriend, family and friends for believing in me during my academic education and their support and interest in my study. With this study a fantastic period as a student ends.

Jeanine van Mersbergen

August 2012

Management summary

Introduction

The healthcare market has become a competitive market, in which hospitals must try to optimize their processes in order to deliver high quality care while at the same time reducing costs (Mans, Schonenberg, Song, Aalst, & Bakker, 2008). Elkerliek hospital Helmond is an organization which is working on their processes to stay ahead of competitors. A new program is being introduced which is part of the VMS safety program and is called 'Fragile Elderly'. The goal of the program is to prevent patients older than 70 years from unnecessary function loss during a hospital stay by screening. Nurses are expected to change their working behavior and perform better. Response to change is a facet of performance which is called adaptive performance (Shoss, Witt, & Vera, 2011). By changing job resources or job demands, employees' adaptive performance and well-being will change positively. A valuable tool in changing job demands and job resources is job crafting (Tims, Bakker, & Derks, 2012). In this study a job crafting intervention will be investigated to increase the adaptive performance of nurses so they can better cope with changes. The core questions in this study are:

1. Can job crafting training and assignments be used as a tool to increase nurses' adaptive and task performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions) at work and what are the effects of job crafting activities?
2. What are the underlying mechanisms of job crafting which explain the effects which are found in the study on well-being as well as adaptive and task performance?

Method

The research model of the current study is depicted in Figure 0-1. The research method which will be used is a pretest-posttest two-group control group design. This research method is widely used in behavioral research to compare groups and research measurement change after experimental treatments (Dimitrov & Rumrill, 2003). The intervention of the current study mainly consisted of action by a training and a personal

crafting plan, based on Van den Heuvel, Demerouti and Peeters (2012). During training sessions background information on job crafting was given.

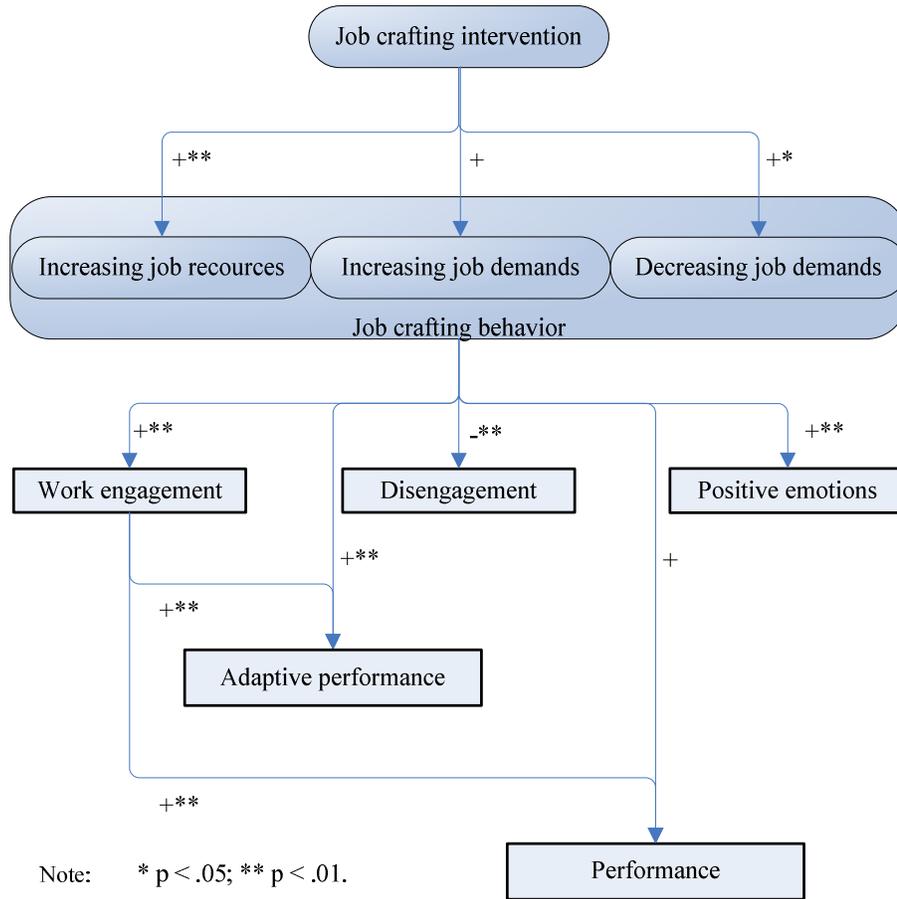


Figure 0-1 The research model of the current study, including significance levels.

In the end, two goals were set on increasing job resources and one goal was set on decreasing job demands in the personal crafting plan. These goals had to be achieved during the three weeks after the training. Table 0-1 gives examples of increasing job resources and decreasing hindering job demands.

Table 0-1
Examples increase job resources *Examples of decrease job demands*

Increase job resources	Decrease job demands
Ask feedback	Simplify tasks
Ask support	Work more efficient
Participate committees	Let go perfectionism
Look for trainings	Make clear appointments
Invest in relationships	Make use of relationships

An example of increase job resources is 'ask for feedback'. For example a goal related to asking for feedback can be: 'Next Tuesday at 11.30h I am going to ask feedback about how I helped the patient X out of bed, because patient X is at risk of falling.' An example of decrease job demands is 'work more efficient'. An example of a goal related to working more efficiently can be: 'Today I am going to fill in the screening directly after the intake of every new patient older than 70 years instead of leaving it until the end of the day.'

Results

The current study implemented a job crafting intervention to increase job crafting behavior. The intervention showed a significant difference for increasing job resources ($F = 29.49, p < .001$) and that the intervention showed a significant difference for decreasing job demands ($F = 4.99, p < .05$). No significant result is found changes in levels of increasing job demands ($F = 1.03, p = .31$), which is not unexpected, as the intervention did not include this strategy in the training and personal action plan.

The intervention showed a positive change in work engagement and analysis provided evidence that the observed positive change in work engagement is an effect of the job crafting intervention ($F = 15.51, p < .001$). Furthermore, the intervention resulted in a negative change for disengagement, which means lower levels of disengagement were experienced after the intervention ($F = 13.52, p < .001$). More positive emotions were experiences after the intervention. Analysis provided evidence that the observed positive change in emotions is an effect of the job crafting intervention ($F = 9.73, p < .01$).

Increase in job resources is positively related to the change in work engagement, but there is no significant link with increase in job demands and decrease in job demands. The results show that differences in job resources and job demands are significant negatively related to change of levels in disengagement, but decrease of job demands is not significant related. The change in increasing job resources is positively related to the change in positive emotions, and decreasing job demands is negatively related to the change in positive emotions. Increasing job demands is not significantly related to positive emotions.

The final objective of the study is to test and evaluate an intervention that improves adaptive performance and task performance. Analysis provided significant evidence that the observed positive change in adaptive performance is an effect of the job crafting intervention ($F = 12.30, p < .001$). No evidence is provided that the observed change in task performance is an effect of the job crafting intervention ($F = 3.83, p = .06$).

Increasing job resources is significantly related to changes in adaptive performance. Changing job demands is not significantly related to adaptive performance. In this analysis it was found that none of the three job crafting behaviors is significantly related to changes in task performance.

Discussion

The current study found significant changes in work engagement, disengagement and positive mood. Increasing job resources was significantly related to the changes of all three outcome variables. In specific, increasing job resources was positively related to work engagement. This is also supported in previous research Tims et al. (2012) (Schaufeli et al., 2009). The current study has also found evidence for the relation between increasing job resources with positive mood and disengagement. These findings provide added information on the role of increasing job resources. Previous research already showed that a lack of social support, which is part of job resources, is linked to disengagement (Maslach, Schaufeli, & Leiter, 2001). The explanation for the findings of the current study can be found in the presence of job resources like social support from colleagues and supervisors, getting feedback, look for trainings and invest in relationships with colleagues. Increasing job resources play an important role in the current study, which is probably due to high work pressure. This is confirmed by previous research of Bakker, Hakanen, Demerouti, and Xanthopoulou (2007).

Increasing challenging job demands was significant for disengagement only. Tims et al. (2012) provided support for the positive link between increasing challenging job demands and work engagement. This finding is not supported in this study. Increasing challenging job demands is only an appropriate strategy when there is no high work

pressure (Maslach et al., 2001). The explanation is that nurses already experience a high workload and low job autonomy and as a result do not feel for increasing challenging job demands. Decreasing hindering job demands was significantly related to changes in positive mood. During the intervention, nurses focused on decreasing job demands by working more efficient, simplifying tasks, and making clear appointments.

The current study found evidence that the job crafting intervention positively changed adaptive performance. Nurses of the intervention group engaged more in process changes, in the current study delirium screening. This is in line with previous research (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012). There was support for the link between increasing job resources and adaptive performance. This is partially in line with previous research (Petrou et al., 2012). The explanation for the findings can be found in the presence of job resources, like having feedback, looking for trainings and investing in relationships with colleagues. This strategy helped the nurses to cope with changes, which is seen in previous research (Bakker et al., 2007). It provided innovativeness and a supportive climate.

Performance is not directly linked to job crafting. An explanation for this finding can be that job crafting behavior is not directly linked with higher task performance. This finding is interesting, because this means that the change in performance is not a result of job crafting, but probably a result of other changes.

Conclusion

In conclusion, answers are provided on the core questions. Firstly a job crafting intervention can be used as a tool to increase nurses' adaptive performance and well-being (i.e. higher work engagement, lower disengagement and more positive emotions) at work. This is very important in a competitive market, where organizations face many changes to optimize their processes. Job crafting is a usable tool to help employees to undergo changes in organizations. Employees should be aware of this job crafting tool. Secondly, increasing job resources is causing the changes which were found. It plays an important role in work experience for nurses. This strategy includes social support from

colleagues and supervisors, getting feedback, look for trainings and invest in relationships with colleagues. The current study used a job crafting strategy, but it is important to note that this is not the only way to improve job resources. The organization itself can influence job resources by giving positive feedback and appropriate rewards. More research on job crafting through an intervention is needed to get more insight in the specific parts of interventions which can increase this behavior. Also, more research is needed to investigate in which situations job crafting will result in the expected outcomes. Finally, more research is needed to develop a job crafting intervention usable for all organizations at all times.

Table of Contents

Abstract.....	III
Preface.....	IV
Management summary.....	V
1 Introduction	1
1.1 Outline of the study.....	2
2 Context of the problem.....	3
3 Theoretical background.....	7
3.1 Research model of this study	7
3.2 Job crafting intervention.....	8
3.3 Job crafting behavior.....	9
3.4 The Job Demands-Resources model	10
3.5 Job crafting strategies.....	12
3.6 Outcomes of job crafting behavior.....	14
3.7 Adaptive performance and task performance.....	16
3.8 Hypotheses	18
4 Research design.....	19
4.1 Repeated measures GLM	20
4.2 Blocked regression.....	20
4.3 Method and procedure.....	21
4.4 The current intervention.....	22
4.5 Measures.....	24
5 Results	26
5.1 General results.....	26
5.2 The effects on job crafting measures.....	29

5.3	The effects on outcomes variables	31
5.4	Mechanisms job crafting measures	34
5.5	Adaptive performance/performance.....	36
6	Conclusions and discussion.....	41
6.1	Conclusions	41
6.2	Theoretical implications.....	42
6.3	Limitations	49
6.4	Practical implications	50
6.5	Future research	52
6.6	Final conclusion	53
	References.....	54
	List of figures.....	59
	List of tables.....	60
	Appendix I Presentation of the job crafting training	61
	Appendix II Booklet Personal Crafting Plan	71

1 Introduction

The healthcare market in the Netherlands is changing. Firstly, these changes are necessary due to an aging population and the expected increase in older patients as a result thereof. Secondly, these changes are needed due to a decrease in working population and the expectation that healthcare organizations will be short-staffed. Thirdly, the budgets of the healthcare providers are decreasing, and technological development causes an increase in costs of providing care. The key business drivers of hospitals are quality of care and customer satisfaction (Hung, Hung, Tsai, & Jiang, 2010). Technological ability to deliver care enables hospitals to provide care even to the most complex disorders of patients (Christensen, Bohmer, & Kenagy, 2000). Therefore, the healthcare market has become a competitive market, in which hospitals must try to optimize their processes in order to deliver high quality care while at the same time reducing costs (Mans, Schonenberg, Song, Aalst, & Bakker, 2008).

Elkerliek hospital is an organization which is working on their processes, to stay ahead of competitors. Initially the main focus of the hospital was to provide care, now performance indicators related to care have become more important. The main three subjects in the policy plan are quality of care, transparency and efficiency. The hospital continuously works at improving these aspects of its processes. Employees of the Elkerliek, especially the nurses, are being confronted with the changes in these processes. Consequently, they are expected to change their working behavior and perform better. Response to change is a facet of performance which is called adaptive performance (Shoss, Witt, & Vera, 2011).

In the current study, a tool is tested to increase adaptive performance and well-being (i.e. higher work engagement, lower disengagement and more positive emotions) of nurses. This can be increased by changing one or more aspects of a job, like done in job redesign. A view on employees' well-being by positive and negative indicators is given in the Job Demands-Resources model of Bakker and Demerouti (2007). This model is the chosen as the theoretical framework in the current study. The model is mainly focused on job

demands and job resources, which result in strain and motivation respectively. By changing job demands or job resources, employees' adaptive performance and well-being will change. A valuable tool in changing job demands and job resources is job crafting behavior (Tims, Bakker, & Derks, 2012). This tool is focused on changing these aspects of work and as a result increases positive outcomes. Therefore in this study job crafting behavior is chosen as a tool to increase adaptive performance and well-being of nurses.

In this study a job crafting intervention will be tested and evaluated to increase the adaptive performance and well-being of nurses.

The core questions in this study are:

3. Can job crafting training and assignments be used as a tool to increase nurses' adaptive and task performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions) at work and what are the effects of job crafting activities?
4. What are the underlying mechanisms of job crafting which explain the effects which are found in the study on well-being as well as adaptive and task performance?

1.1 Outline of the study

After this introduction, the context of the problem in the Elkerliek hospital Helmond will be explained in chapter 2. The chapter ends by an explanation of which adaptive performance is important in the hospital. Chapter 3 provides theoretical background of job crafting intervention as a tool to increase adaptive performance and well-being. The research model will be explained. In the end the hypotheses are shown. Background on the current research design and intervention is given in chapter 4. This chapter provides information on methods and measures used in this study. Next, in chapter 5, the results of the current study are represented. All hypotheses are checked for significance. Finally, chapter 6 discusses the results of the current study and gives theoretical and practical implications.

2 Context of the problem

Elkerliek hospital is a modern hospital, which delivers secondary health care on three locations in North Brabant, namely Helmond, Deurne and Gemert. The locations are indicated in Figure 2-1.

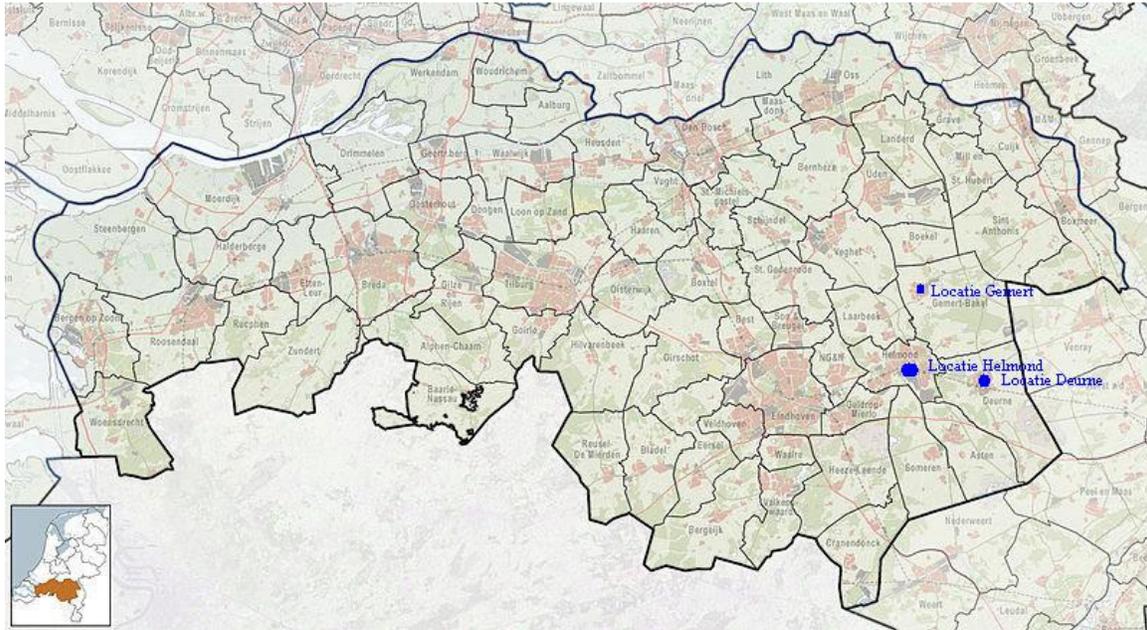


Figure 2-1 The map displays three locations of Elkerliek hospital

The hospital has around 145 medical specialists and around 2.200 employees working on three locations. It has around 500 recognized beds, for around 18.500 inpatients and 17000 surgeries per year.

In Elkerliek hospital Helmond a new program is being introduced for fragile elderly people, which is in line with the policy plan. This program is part of the VMS safety program and is called 'Fragile Elderly'. The goal of the program is to prevent patients older than 70 years from unnecessary function loss during a hospital stay. This goal is achieved by screening all patients over the age of 70 on four aspects: delirium, fall risk, undernourishment and physical limitations. A prediction is made as to whether a patient is at risk for one or more of these four aspects. If a patient is indicated with a risk for one or more aspects, the hospital can engage prevention and treatment interventions so avoiding unnecessary function loss during their hospital stay. In terms of quality and

costs, these prevention and treatment plans can increase quality of care for the patient and decrease costs by reducing unnecessary stay of a patient.

At this moment, the adapted process in the Elkerliek hospital contains the following steps. If a patient older than 70 years old is hospitalized in Elkerliek hospital, nurses must screen the patient on the four abovementioned aspects and record this in a digital quality chart. The outcome can reveal a risk for one or more aspects, or no risk for all aspects. If a risk is indicated, the results are communicated with the involved department by implementing a checklist in a care chart. This checklist is then filled in for several days, until no more risk is indicated. During this time nurses can include preventative actions and treatment interventions in their daily care of the patient. If the patient is no longer at risk, normal daily care can be resumed.

An overview of the process is given in Figure 2-2.

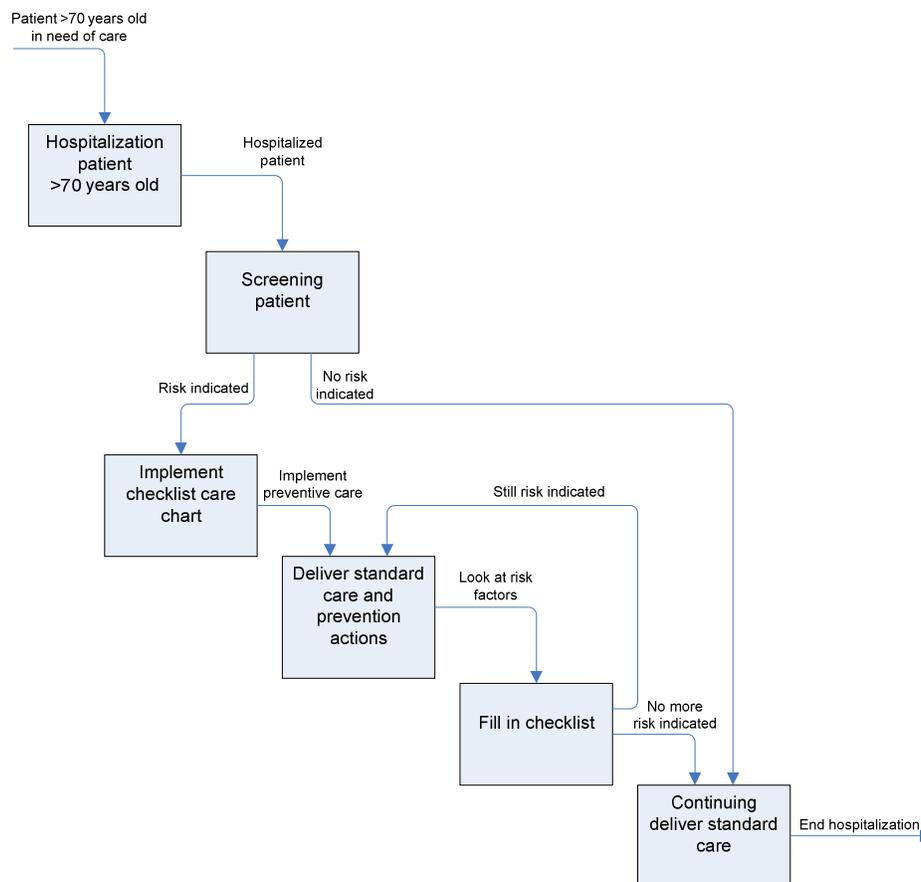


Figure 2-2 Process at Elkerliek hospital (Elkerliek, 2012)

This safety program has been introduced in several departments, but the fact that that not all hospitalized patients older than 70 years are screened for delirium forms a problem. Firstly, the program can prevent patients older than 70 years from unnecessary function loss during a hospital stay and therefore it is important to screen all patients. Secondly, the VMS safety program ‘Fragile Elderly’ is implemented in hospitals nationwide and screening results can be compared in the future.

Table 2-1 shows firstly measurement density (%), which is the percentage of patients older than 70 years which was screened per department in the past year, and secondly elderly patients (%), which is the percentage of screened patients who is older than 70 years.

Table 2-1

Measurement density and delirium per department

Department	1B	1C	3A	3B	3C	3D	3E	4B	4C
Measurement density %	59.57	28.43	12.60	29.37	54.43	80.90	9.80	46.09	50.15
Elderly patients %	44	33	58	38	34	95	53	45	56

The average measurement density is 41.26%. This means that for 41.26% of patients older than 70 years the checklist is completed. The average score has a standard deviation of 23.18%, which indicates a high difference between departments. The highest score is 80.90% and the lowest score is 9.80%.

Furthermore, even though a screening is completed, the checklist is often not implemented in the care chart. This checklist is of great importance when measuring the patients’ situation over time and enabling an overview of the situation. It is not known if preventative actions are included in the nurses’ daily job.

The implementation of delirium screening is a change in a work process. Nurses of the Elkerliek hospital are being confronted with the changes in their work. Consequently, they are expected to change their working behavior and perform better. In the current study, adaptive performance will be described as the response to four aspects of delirium screening. The first aspect is using the screening in the quality questionnaire to predict risk of delirium. The second aspect is using the checklist in the care chart. Third, is using

preventative actions and treatment interventions in the daily job. Fourth, focus on achieving high measurement densities for delirium.

As mentioned before, the current study test and evaluate a job crafting intervention to improve adaptive performance. The intervention should optimize the introduction of delirium screening. Job crafting behavior consists of changing job resources or job demands. Nurses are expected to cope better with changes if they are able to influence their own work by changing these aspects of work. According to Bakker and Demerouti (2007) job demands are those physical, psychological, social or organizational aspects of a job that require effort and skills of an employee. Changing job demands will help to cope with work pressure. Physical, psychological, social or organizational aspects of a job which are functional in achieving work goals, reduce job demands and stimulate an employee are called job resources (Bakker & Demerouti, 2007). Changing job resources will increase employees' job resources to complete their tasks.

Job crafting is used as a tool to improve performance of nurses, in the current study delirium screening. It is expected that changing job demands and resources will help nurses to use the screening in the quality questionnaire to predict risk of delirium; to use the checklist in the care chart; to use preventative actions and treatment interventions in the daily job; and to focus on achieving high measurement densities for delirium. Changing job demands and job resources will increase nurses' experiences with work pressure as well as motivation. This is expected to influence their adaptive performance, which is response to change. Furthermore, it is expected that they are more able to complete their tasks and have higher levels of well-being.

3 Theoretical background

In chapter 3, the theoretical background of this study is presented. After this chapter, it is clear what the current study consists of. First, the research model of this study is explained. Hereafter, each aspect of this research model will be discussed separately. In the end, all hypotheses are presented.

3.1 Research model of this study

The focus of this study is to test and evaluate an intervention to improve adaptive performance of nurses. The model of this study is presented in Figure 3-1.

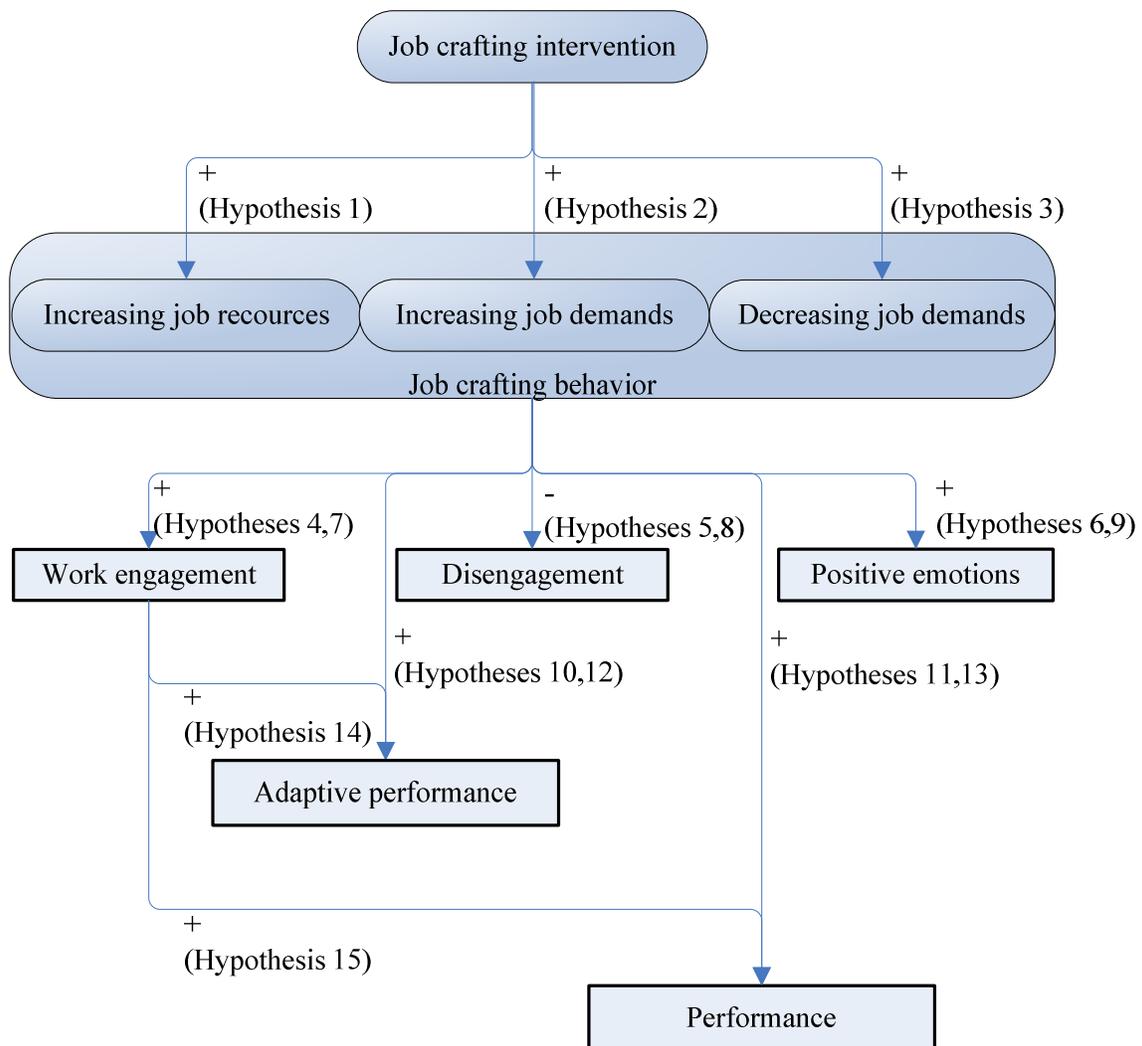


Figure 3-1 Research model of this study

The focus of the intervention will be to enhance job crafting behavior, because job crafting behavior will be used as a tool to improve adaptive performance and employee well-being. The job crafting intervention should result in a positive change in work engagement, disengagement and mood. In conclusion, positive effects are expected in adaptive performance as well as in performance. Each aspect of the model will be explained in the next paragraphs.

3.2 Job crafting intervention

The current study describes an intervention as an occurrence between two points of time. It will be used as a tool, to make nurses aware of job crafting behavior. Intervention techniques are widely used for human resources management. Dieleman, Gerretsen, and van der Wilt (2009) reviewed 48 published studies on job related interventions to increase work performance such as: continuing education and supervision; support system related interventions such as payment of incentives; creating an enabling environment such as decentralization and adaption of regulations; or combined interventions. The overall conclusion was that human resource interventions can contribute positively to workers performance (Dieleman et al., 2009). The paper showed that in order to successfully improve workers performance, combined interventions of participatory and/or interactive training are needed as well as job aids and strengthening systems. (Dieleman et al., 2009). Furthermore, continuing education will be effective for the short term. For long term effects, additional interventions need to be used (Dieleman et al., 2009). It seems that training increases knowledge and skills, but this is probably only effective for the short term. The contribution to performance is increased however, when a training has a participative approach, and practise is incorporated during or after training.

The objective of this study is to improve job crafting behavior by means of an intervention, encouraging proactive behavior focused on building job resources and changing job demands. It has been argued that the development of personal resources can be supported by interventions, which used personally valuable goal setting (Luthans, Avey, Avolio, Norman, & Combs, 2006). Personal goals are more in line with personal

values and needs. Research provided evidence that goal setting will be more effective when personal goals are set instead of more general goals (Brunstein, Schultheiss, & Grassman, 1998). Bateman and Crant (1999) suggest that proactive behavior is a result of the individual and the environment. As a result, this can be learnt and changed. During training, proactivity is enhanced by writing personal reports, which identify strengths and weaknesses of someone and help to identify opportunities for increasing performance and well-being.

Van den Heuvel, Demerouti and Peeters (2012) provide an example of a job crafting intervention. This study implemented job crafting in an organization by training and goal setting. It included reflection and action which resulted in positive outcomes, like building job resources. Their training started with a job crafting workshop where by means of reflection, the current job performance was considered. Their workshop lasted one day during, which the essence of job crafting was explained. Job crafting exercises were done and at the end of the day, every employee made a personal crafting plan. During the next four weeks, employees put job crafting into practice, which constitutes the action phase of the intervention. The intervention was concluded by a meeting during which employees discussed their job crafting experiences. This again constituted a reflection phase of the intervention. This helped to identify successes, problems and solutions. The intervention of the current study will be based upon this example of a job crafting intervention. The training of the current intervention will be smaller, because of tied schedules. Furthermore, three goals instead of four goals will be set in the personal crafting plan. Later in this study, the intervention will be explained in detail.

3.3 Job crafting behavior

The objective of the intervention is to make nurses aware of job crafting actions that they could undertake, which can improve adaptive and task performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions). In organizations, a top down process job design is used to identify job tasks and roles and the impact on the individual, group and organization (Tims & Bakker, 2010). By having a well-designed job, organizations can select people with the right knowledge, skills and

abilities for the job. Individual job redesign is a top down process used by the supervisor, to change an aspect of the job for an employee (Tims & Bakker, 2010). If these changes are made by the employee instead of the supervisor, this is called job crafting. Job crafting can be explained as a form of individual job redesign and is a bottom up process.

Job crafting is what employees do to redesign their jobs and in doing so achieve higher job satisfaction, as well as engagement, resilience, and thriving at work (Berg, Dutton, & Wrzesniewski, 2008). It is specifically defined as activities undertaken by employees, which include changing physical and cognitive tasks and/or relational boundaries of their work (Wrzesniewski & Dutton, 2001). Changes are made to balance their job demands and job resources with their personal abilities and needs (Tims et al., 2012). Employees engage in job crafting at all kinds of organizations and in a wide range of functions (Berg et al., 2008) and it is a continuous process in an everyday routine for an employee (Berg et al., 2010). This proactive behavior helps to respond to challenges and constraints composed by a job (Berg et al., 2010).

3.4 The Job Demands-Resources model

The current study uses the Job Demands-Resources model of Bakker and Demerouti (2007) as the theoretical framework to explain employees' well-being. This model gives more understanding of negative and positive indicators of employee well-being (Bakker & Demerouti, 2007). Job characteristics are classified into two general categories in this model: job demands and job resources. In order to understand job crafting conceptualized around the Job Demands-Resources model, the Job Demands-Resources model needs to be explained. The model is depicted in Figure 3-2.

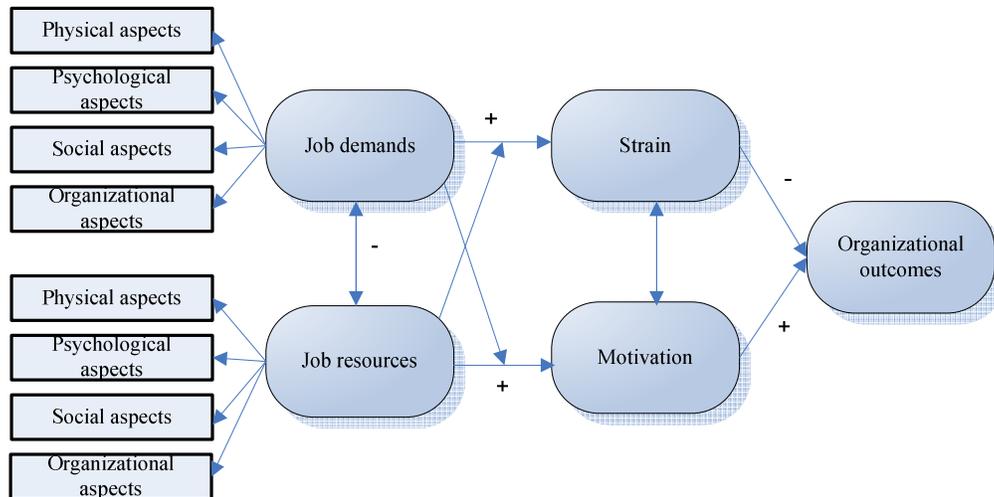


Figure 3-2 Job Demands-Resources model of Bakker and Demerouti (2007)

According to Bakker and Demerouti (2007), job demands are those physical, psychological, social or organizational aspects of a job that require effort and skills of an employee. These job demands are therefore associated with costs. These job demands can be positive or negative, depending on the amount of effort needed to meet these demands. Physical, psychological, social or organizational aspects of a job which are functional in achieving work goals, reduce job demands and stimulate an employee are called job resources (Bakker & Demerouti, 2007). These are needed to help an employee and increase intrinsic and/or extrinsic work motivation.

The model describes the interaction between job demands and job resources, resulting in strain and motivation respectively. According to Bakker and Demerouti (2007), if job demands are high and an employee is not provided with the needed job resources this can result in strain. When job demands are high and an employee has enough job resources, this results in motivated people.

According to Wrzesniewski and Dutton (2001), the aim of job crafting behavior is to change one or more aspects of a job. These changes can have an effect on the whole job or certain parts of the job. This can affect physical task boundaries, cognitive task boundaries or relational boundaries of a job. The Job Demands-Resources model is more focused on the demands and resources of a job (Bakker & Demerouti, 2007).

Wrzesniewski and Dutton (2001) consider changing the meaning of the work by cognitive crafting, while Bakker and Demerouti (2007) are more focused on the demanding aspects of a job in their Job Demands- Resources model.

3.5 Job crafting strategies

The Job Demands-Resources model conceptualizes job crafting around specific job characteristics, which describes more precisely the demanding aspects of tasks that employees craft and the kind of resources they arrange in order to manage their work (Tims et al., 2012). As a result of framing job crafting in terms of the Job Demands-Resources model, four strategies of job crafting can be defined, namely increasing job resources, decreasing job resources, increasing job demands and decreasing hindering job demands (Tims & Bakker, 2010). However, decreasing job resources is not defined as a purposeful behavior, so this is not taken into account (Hobfoll, 2001). Literature supported that, in general, and on a day-to-day level, job crafting consists of the other three strategies (Petrou et al., 2012). The current study uses job crafting as a tool to improve adaptive performance and well-being. Therefore, an intervention will make nurses aware of these strategies for changing job demands and resources.

The first strategy encompasses increasing job resources, which influence work engagement, commitment and client satisfaction positively and decrease undesired outcomes like burnout (Tims & Bakker, 2010). This strategy includes proactive behavior executed to gain specific resources (Lee, 1997). Consequently, this behavior can be explained as a proactive coping with positive outcomes (Salanova & Schaufeli, 2008). An example of increasing resources is when an employee undertakes proactive behavior to gain feedback or information (Lee, 1997). In this example the employee can ask feedback from a colleague or supervisor on a specific task. For this study it is hypothesized that participants in the intervention group will experience higher levels of increasing job resources in the follow up compared with participants in the control group.

The second strategy encompasses increasing challenging job demands, which will result in opportunities to use all skills an employee has (Tims & Bakker, 2010). While

hindering job demands have negative relationships with satisfaction and commitment, challenging job demands have a positive relationship with these outcomes (Podsakoff, LePine, & LePine, 2007). In particular, the challenging job demands are positively linked to turnover and other positive implications. These challenging demands can play a motivational role. This strategy can be increased by adding tasks to their job, volunteering for interesting project groups or taking over tasks from their supervisor. For example an employee can be an active member of a work group which is responsible for a process improvement of a work aspect. For this study, it is expected that participants in the intervention group will experience higher levels of increasing job demands in the follow up compared with participants in the control group.

The third strategy encompasses decreasing hindering job demands, which means that an employee does not undertake tasks which exceed their capabilities (Tims & Bakker, 2010). If this strategy is used to reduce counterproductive behavior, this can result in positive outcomes for the job crafter (Chu & Choi, 2005). As a result an employee can continue working, without decreasing their well being. Activities of decreasing hindering demands can emotionally, mentally or physically minimize job demands or reduce workload and pressure. For example, an employee can reduce the number of interactions with colleagues by combining topics instead of handling every topic separately. For this study, it is hypothesized that participants in the intervention group will experience higher levels of decreasing job demands in the follow up compared with participants in the control group.

These three strategies define the forms of job crafting, which are used in the current study. Important to note is that the Job Demands-Resources model is linked with the view of Wrzesniewski & Dutton (2001). Task crafting includes altering the form or number of activities during job performance on a daily basis. This form of crafting can be interpreted as changing job demands regarding the Job Demands-Resources model, which will result in opportunities to use all skills an employee has or prevent an employee from undertaking tasks which exceed their capabilities (Tims & Bakker, 2010). Relational crafting is defined as with whom one interacts while doing the job. If this is

framed in the Job Demands–Resources model, this can be seen as changing job resources, which is proactive behavior to gain feedback or information (Lee, 1997). Changing cognitive task boundaries is harder to reframe, because this is focused more on one's inner self. In conclusion, both views focus on employees who are changing their work to better handle problems and find solutions.

3.6 Outcomes of job crafting behavior

The job crafting intervention will focus on improving positive outcomes and decreasing negative outcomes of job crafting activities. Previous studies provided evidence that job crafting activities are positively related to work engagement. Work engagement is characterized by three strategies, namely vigor, dedication and absorption and can be described as a positive, fulfilling, work-related state of mind (Schaufeli, Salanova, Gonzales-Roma, & Bakker, 2002). Schaufeli et al. (2002) described vigor as indicating high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence also in the face of difficulties. Dedication is defined by a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is defined as being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work.

The effect of job crafting on work engagement was examined by Petrou et al. (2012). Results showed that employees were more engaged on days that employees undertook activities to increase job demands. Furthermore was found that all aspects of job crafting but one, namely decreasing hindering job demands, were positively related to work engagement (Tims et al., 2012). Job resources are related to organizational commitment through the motivational process of work engagement (Hakanen, Bakker, & Schaufeli, 2006). There is also evidence for the effect of job crafting on commitment. In particular, task crafting improved commitment (Ghitulescu, 2007). According to Ghitulescu (2007) relational crafting did increase affective outcomes like organizational commitment. There is a positive relationship found between task crafting and organizational commitment and cognitive crafting and commitment.

Therefore, in this study, it is expected that the participants in the intervention group will experience higher levels of work engagement in the follow up compared with participants in the control group. Work disengagement can be described as distancing oneself from one's work, and experiencing negative attitudes towards work (Demerouti E. , Bakker, Nachreiner, & Schaufeli, 2001). Together with exhaustion, this is one of two dimensions of burnout (Demerouti E. , Bakker, Vardakou, & Kantas, 2003). In line with the previous hypothesis it is expected that participants in the intervention group will experience lower levels of disengagement in the follow up compared with participants in the control group. As indicated in this paragraph, job crafting behavior is the expected mechanism for achieving changes in work engagement and disengagement. Therefore, it is hypothesized that the increase in job crafting measures will be positively related to individual changes in levels of work engagement and negatively to disengagement in post measures after controlling for pre measures.

The study of Ghitulescu (2007) showed that job crafting activities can have a positive influence on individual well-being via increased job satisfaction. With respect to the same time interval, a four-day survey was implemented to assess both job stressors and proactive behavior (Fritz & Sonnentag, 2009). This study provided evidence that job stressors as situational constraints and positive mood are positively associated with proactivity on the same workday. For the following day proactivity and positive mood are both positively related (Fritz & Sonnentag, 2009).

Therefore in this study it is hypothesized that the participants in the intervention group will experience more positive emotions in the follow up compared with participants in the control group. This effect is expected because the intervention supports job crafting behavior. It is expected that the increase in job crafting behavior like increasing job resources, increasing challenging job demands and decreasing hindering job demands is positively related to the change in positive emotions. Changing these strategies can influence work pressure negatively and motivation positively. This increases positive emotions. Therefore, it is hypothesized that the increase in job crafting measures will be related to individual changes in levels of positive emotions in post measures after controlling for pre measures.

3.7 Adaptive performance and task performance

The final objective that needs to be achieved in the current study, is improving adaptive performance. It is described by the extent to which an individual adapts to changes in a work system or work roles (Griffin, Neal, & Parker, 2007). In the current study nurses are facing changes in their work. According to Griffin et al. (2007) adapting to changes includes the degree to which an individual copes with, responds to, and supports changes that affect their role as an individual. If adaptive performance can be improved, nurses are more able to cope with changes, i.e. using the screening in the quality questionnaire to predict risk on delirium and using the checklist in the care chart. For an organization this results in better opportunities to implement changes in work processes. They will experience less resistance to changes if adaptive performance is increased, which is needed to implement more successfully. Petrou et al. (2012) showed that there is a link between job crafting and organizational change. The conclusion is that increasing resources and challenging demands are positively linked to new clients. According to Schwartz and Bilsky (1990) employees who were more open to change in their organizational context were more flexible when confronting change. In line with this employees who were less open to change in their organizational context showed a preference for a more stable work context (Lieberman, Idson, Chen, Camacho, & Higgings, 1999).

In specific, adaptive performance consists of eight strategies, which include handling emergency situations; handling work stress; solving problems creatively; dealing with uncertain situations; learning work tasks, technologies, and procedures; demonstrating interpersonal adaptability; demonstrating cultural adaptability; and demonstrating physically oriented adaptability (Pulakos, Arad, Donovan, & Plamondon, 2000). In the current study adaptive performance is determined by four aspects, namely using the screening in the quality questionnaire to predict risk on delirium; using the checklist in the care chart; usage of preventative actions and treatment interventions in their daily job; focus on achieving high measurement densities for delirium. According to Pulakos et al. (2000) adaptive performance is how nurses react on the changes, for example how they solve problems and how they deal with uncertain situations. In this study, it is expected

that participants in the intervention group will experience a higher adaptive performance in the follow up compared with participants in the control group. It is expected that, after controlling for pre measures, the increase in job crafting measures will be positively related to individual changes in levels of adaptive performance in post measures.

Research provided evidence that, in particular, task crafting can improve effectiveness outcomes like enhanced quality and efficiency (Ghitulescu, 2007). According to Ghitulescu (2007), relational crafting can increase efficiency outcomes. There is more evidence of the positive effect of job crafting on task performance. Research concluded that engaged employees received higher quality ratings given by customers than less engaged employees (Salanova, Agut, & Peiró, 2005). There is also a significant outcome for the positive link between job crafting and task performance (Tims et al., 2012). Increasing social and structural job resources and increasing job demands are positively linked to employability (Tims et al., 2012). The current study will focus on nurses' performance. Performance on work tasks needs to be improved to gain optimal results of new processes. The intervention will influence work pressure and motivation through changing job demands and resources. It is expected that nurses are more able to perform their job by influencing their work. Therefore, in this study it is hypothesized that participants in the intervention group will perform at higher levels of task performance in the follow up compared with participants in the control group. In line with previous hypotheses, it is expected that job crafting behavior is the underlying mechanism responsible for changes. Therefore it is expected that, after controlling for pre measures, the increase in job crafting measures will be positively related to individual changes in levels of task performance in post measures.

Finally, evidence is provided that the psychological capital of a positive employee may be an important contribution to positive organizational change (Avey, Tara, & Luthans, 2008). Openness to change is strongly related to adaptive performance (Griffin et al., 2007). Engagement is more than simple satisfaction, but is related to this openness and loyalty of an employee (Macey & Schneider, 2008). Therefore it is expected that after controlling for pre measures in the current study, the increase in work engagement will be

positively related to individual changes in levels of adaptive performance and task performance in post measures.

3.8 Hypotheses

In summary, in this study 15 hypotheses are tested. Firstly, it is hypothesized that the participants in the intervention group will experience higher levels of increasing job resources in the follow up compared with participants in the control group (Hypothesis 1). Secondly, it is expected that the participants in the intervention group will experience higher levels of increasing challenging job demands in the follow up compared with participants in the control group (Hypothesis 2). Thirdly, it is hypothesized that the participants in the intervention group will experience higher levels of decreasing hindering job demands in the follow up compared with participants in the control group (Hypothesis 3). These changes in job crafting measures result in the hypotheses that the participants in the intervention group will experience higher levels of work engagement (Hypothesis 4), lower levels of disengagement (Hypothesis 5) and more positive emotions (Hypothesis 6) in the follow up compared with participants in the control group. In addition, the increase in job crafting measures will be related to individual changes in levels of work engagement (Hypothesis 7), individual changes in levels of disengagement (Hypothesis 8) and in levels of positive emotions (Hypothesis 9) in post measures after controlling for pre measures. The objective of the current study is to improve adaptive performance and task performance. Therefore is hypothesized that the participants in the intervention group will experience a higher adaptive performance (Hypothesis 10) and perform higher levels of task performance (Hypothesis 11) in the follow up compared with participants in the control group. For job crafting behavior it is hypothesized that the increase in job crafting measures will be positively related to individual changes in levels of adaptive performance (Hypothesis 12) and individual changes in levels of task performance (Hypothesis 13) in post measures after controlling for pre measures. Finally, it is expected that the increase in work engagement will be positively related to individual changes in levels of adaptive performance (Hypothesis 14) and individual changes in levels of task performance (Hypothesis 15) in post measures after controlling for pre measures.

4 Research design

The research method which will be used, is a nonrandomized control group pretest-posttest design. This research method is widely used in behavioral research to compare groups and research measurement change after experimental treatments (Dimitrov & Rumrill, 2003). It is important to notice that these groups are not randomized chosen. At three floors, two departments are chosen to participate in the study. One experimental group of nurses was chosen to undergo the intervention and one control group of nurses who not undergo the intervention. In total, six departments participated in filling in the questionnaires for intervention and control, and three departments participated in the intervention.

Important aspects in nonrandomized control group pretest-posttest designs will be explained (Dimitrov & Rumrill, 2003). The first one is internal validity, which is the degree to which the intervention makes a difference in the specific setting. The second aspect is external validity, which is the degree to which the intervention effect can be generalized across populations, settings, intervention variables and measurement instruments. The most used notations are:

Y_1 = pretest scores,

T = intervention,

Y_2 = posttest scores,

$D = Y_2 - Y_1$ (gain scores),

RD = randomized design (random selection and assignment of participants to groups and, then, random assignment of groups to treatments).

The practical advantage of this setting is that this does not disrupt the existing setting and as a result reduces the reactive effects of the experimental procedure (Dimitrov & Rumrill, 2003). The external validity of the design increases. A disadvantage of this setting is that it is more sensitive to internal validity, namely to problems which can occur due to interaction between factors (Dimitrov & Rumrill, 2003). This means that the effects which are found can relate to some other difference than the intervention. It is important to take this into account during analysis.

4.1 Repeated measures GLM

The interest of this study is to examine the effect of the intervention on five outcome variables. SPSS is used to investigate the effects of the job crafting intervention. In this study repeated measures are used and therefore not all measures are independent. A repeated measures GLM design is more appropriate and chosen to analyze the hypotheses. The advantage of this method is that it is possible to include repeated measures. The result of the repeated measures GLM is that it increases statistical power and teaches something about the hypothesized effects over time.

The analysis divides the independent variables into two types, namely between-subjects independent variables and within-subjects independent variables. Between-subjects variables differ across the rows of the data matrix, which in this study is the training or control group. Within-subjects independent variables differentiate the columns of the data matrix, which in this study is dependent variable time 1 and the same variable time 2.

The output consists of tables with information in Box's Test of Equality of Covariance Matrices and significance levels. It is important to take a look at Box's Test of Equality of Covariance Matrices. The significance level should be $p > .05$, so that the output results of SPSS table 'coefficients' can be used. In the 'coefficients' table, the significance level must be $p < .05$. If it is at this significance level, evidence is given to the fact that the effects on the dependent variable are caused by the job crafting intervention.

4.2 Blocked regression

A regression analysis is an appropriate method to analyze the estimates of the coefficients of a linear equation, involving one or more independent variables that best predict the value of the dependent variable. If more than one variable is chosen as independent variable, then a multiple regression is obtained. By using the 'block' function in SPSS more lists can be used to analyze predicted relations.

'Enter' is a method in regression analysis that enters all variables into the equation as a group. For this analysis the dependent variable is measurement at time 2. The independent variable in block one is the dependent variable at time 1.

The job crafting training consists of three levels of job crafting, namely increasing job resources, increasing job demands and decreasing job demands. Block 2 consists of the

expected independent variables that best predict the dependent variable, namely the three factors of job crafting. Outcomes of this analysis give an indication as to whether the proposed independent variables predict the outcome of the dependent variable at time 2. The measurement level $p < .05$ for significant results.

To analyse these hypotheses, a regression model with two blocks is used. The relation between the job crafting measures with the dependent variable at time 2 is researched, controlling for the dependent variable at time 1.

4.3 Method and procedure

This study consisted of a pre measure and a post measure among the members of one intervention group and one control group. It was decided to combine the VMS safety program 'Fragile Elderly' with the job crafting intervention. Therefore, after interviews were taken on this topic, three sector managers were asked to invite two departments each to participate in the intervention. These had to be departments already working with the safety program. In total nine departments are already working with this safety programme. After deciding on which six departments would be included, three departments had to function as the control group and three departments had to undergo the intervention. In this way the control group was to be from the same target organization, which allowed for comparisons within the organization. All department managers were met individually, to discuss the research design and intervention. They confirmed that all six departments were prepared to participate in the study and therefore the measurements and training were planned. Nurses of the three departments chosen for the intervention, were approached to participate in the intervention. The department manager made use of team meetings and newsletters. At every department a poster was displayed with the information on dates and times as well as a registration list. They had approximately two weeks to register and also received reminders to register during this period.

Participants were asked to fill out a questionnaire twice. The first before the intervention started, which is hereafter called T1. The second two weeks after the intervention ended, which hereafter is called T2. Time between T1 and T2 is six weeks.

Of the 60 nurses in the intervention group, 40 nurses filled in the questionnaire at T1 and 32 nurses at T2. Of the 60 nurses in the control group, 32 nurses filled in the questionnaire at T1 and 26 nurses at T2. The intervention group included 4 (12.50%) male and 28 (87.50%) female. Their mean age was 41.2 years old (SD=11.3 years). On average they had 21.6 years work experience as a nurse (SD=11.3 years), and 17.2 years at the Elkerliek hospital (SD=11.0 years). The control group included 2 (7.69%) male and 24 (92.31%) female. Their mean age was 32.1 years old (SD=8.8 years). On average they had 12.4 years work experience as a nurse (SD=9.3 years), and 9.44 years at the Elkerliek hospital (SD=11.0 years).

After conducting t-test on these data it is important to notice that the two groups are not statistically equal. There is a statistical difference in mean age ($p < 0.01$; $t = 3.365$), work experience ($p < 0.01$; $t = -3.337$) and work experience at the Elkerliek hospital ($p < 0.01$; $t = -2.923$). This information is important in describing limitations of the current study.

4.4 The current intervention

The current study implemented a job crafting intervention. This intervention consisted of a training and a personal crafting plan. Table 4-1 gives an overview of the study design.

Table 4-1
Overview study design

Premeasurement	Training	Personal Crafting Plan	Post measurement
April	May	May	June

During training sessions, background information on job crafting was given. The complete presentation can be found in Appendix I Presentation of the job crafting training (in Dutch).

First, the Job Demands –Resources model was explained. After job crafting was explained, success stories of past job crafting behaviors of participants were shared and discussed. This was helpful to reflect on the current work performance. Table 4-2 summarizes the points which were discussed.

Table 4-2
Content of the training

Part	Subject
1	Introduction
2	Associations words job crafting
3	Explanation Job Demands- Resources model
4	Definition work environment
5	Combine work environment and model
6	Relate to work motivation
7	Explain assignment and set goals

During the meetings, participants were stimulated to set goals related to job crafting and the VMS safety program ‘Fragile Elderly’ in a personal action plan. This personal action plan can be found in Appendix II Booklet Personal Crafting Plan (in Dutch). Due to high work pressure, the focus did not include increasing job demands. Two goals were set on increasing job resources and one goal was set on decreasing job demands. For these goals the pathways to achieve these goals and possible obstacles must be identified. They had to aim for one goal each week, during the three weeks following the training.

Table 4-3 gives examples of increasing job resources in week one and two.

Table 4-3
Examples increase job resources

Increase job resources
Ask feedback
Ask support
Participate committees
Look for trainings
Invest in relationships

More examples of increasing job resources are given in this table. An example is ‘ask for feedback’. For example a goal related to asking for feedback can be:

‘Next Tuesday at 11.30h I am going to ask feedback about how I helped the patient X out of bed, because patient X is at risk of falling.’

The assignment in week three focuses on decreasing hindering job demands. Table 4-4 gives examples of decreasing hindering job demands.

Table 4-4
Examples decrease hindering job demands

Decrease job demands
Simplify tasks
Work more efficient
Let go perfectionism
Say 'no'
Make clear appointments
Make use of relationships

More examples of decreasing job demands are given in this table. An example is 'work more efficient'. An example of a goal related to working more efficiently can be:

'Today I am going to fill in the screening directly after the intake of every new patient older than 70 years instead of leaving it until the end of the day.'

4.5 Measures

The focus of this study is to investigate whether job crafting training and assignments can be used as a tool to increase nurses well-being (i.e. higher work engagement, lower disengagement and more positive emotions) as well as adaptive and task performance, in general, and in particular for the VMS safety program 'Fragile Elderly'. Also, uncovering which underlying mechanisms of job crafting explain the effects which are found in the current study on well-being and adaptive performance. These questions are answered in terms of changes in job crafting behavior, positive emotions, disengagement, work engagement, performance and adaptive performance.

Job crafting: Job crafting consist of three strategies, namely increasing job resources, increasing challenging job demands and decreasing hindering job demands. The original job crafting measures (Tim et al., 2012) are modified and used to measure the three strategies (Petrou et al., 2012). Four items on increasing job demands, four items on increasing job resources and five items on decreasing job demands are measured on a five-point ranging scale from (1) "Never" to (5) "Always". High scores indicate a high level of job crafting behavior. Pre measurement $\alpha=.655$ and post measurement $\alpha=.650$.

Work engagement: Work engagement consists of three core dimensions, namely vigor, dedication and absorption. The UWES (Schaufeli & Bakker, 2003) was used to measure

these three dimensions (e.g. “At work I am bursting with energy”). In total nine items were scored on a seven-point rating scale ranging from (0) “never” to (6) “every day”. High scores indicate a high level of work engagement. Pre measurement $\alpha=.913$ and post measurement $\alpha=.929$.

Disengagement: Burnout consists of two dimensions, namely exhaustion and disengagement. These are both measured with OLBI. The current study focuses on disengagement only. OLBI formulated disengagement in a positive and negative way (e.g. “Sometimes I am tired before I go to work”) (Demerouti et al., 2003). The scale ranges from (1) “Do not agree at all” to 4 “Completely agree”. Before the data is used for analysis, some variables were re-coded. Questions on disengagement were formulated in a positive and a negative way, and therefore the positive must be recoded to negative ones. Afterwards high scores indicate high levels of disengagement. Pre measurement $\alpha=.841$ and post measurement $\alpha=.789$.

Mood: Positive mood is measured with JAWS (Katwyk, Fox, Spector, & Kelloway, 2000). It assesses a wide range of emotional reactions at work, positive or negative. Seven items on positive emotions were measured (e.g. “This week I felt happy”). They were measured on a seven-point ranging scale from (1) “Never” to (7) “Extremely often”. High scores indicate a high level of positive emotions. Pre measurement $\alpha=.857$ and post measurement $\alpha=.881$.

Adaptive performance: Adaptive performance is measured on a four item scale. This originated from the preferences of the Elkerliek hospital (e.g. “I use the screening in the quality chart to predict risk on delirium”; “I use the checklist in the care chart”; “I use prevention actions and treatment interventions in my daily job”; “I focus on achieving high measurement densities for delirium”). The scale ranges from (1) “Never” to 5 “Extremely often”. High scores indicate high levels of adaptive performance. Pre measurement $\alpha=.911$ and post measurement $\alpha=.909$.

Task performance: Task performance is measured by a scale developed by Williams and Anderson (1991). Seven items on task performance were measured (e.g. “Fulfills responsibilities specified in job description”) (Williams & Anderson, 1991). They were measured on a five-point ranging scale from (1) “Strongly disagree” to (7) “Strongly

agree". High scores indicate high levels of task performance. Pre measurement $\alpha=.807$ and post measurement $\alpha=.770$.

5 Results

In this chapter the hypotheses are analyzed and tested according to the expected model which is depicted in Figure 3-1. First, general information on the data is shown. Hereafter, the change in job crafting measures is analyzed. Next, the effect on outcome variables is tested. In the end, the change in adaptive performance and task performance is shown.

5.1 General results

Table 5-1 shows the means and standard deviations (SD) of the variables of the two groups measured at T1 and T2. In the last two columns of Table 5-1 t-values and p-values are presented for the measures at time 1.

These values represent whether there is a significant difference between the two groups. First, data was checked on Levene's Test for Equality of Variances. The test showed that variances of the variables were not significant different, which means that the assumption of Levene's Test of Equality of Variances is met.

Now, means and SDs can be statistical tested. If $p < .05$ there is a significant difference between the groups. All p-values in the current study are $p > .05$, which means that the values not significant differ between the training and control group. It can be concluded that the means of the variables at T1 do not differ, when comparing the intervention and the control group at time 1. This is an advantage for making conclusions on the changes achieved by the intervention.

As expected there are changes observed between the T1 measurement and T2 measurement of the intervention group. It is interesting to see these scores, because the hospital is scoring quite well on the measures, but they are facing an implementation problem. Therefore, it was expected that improvement in the measures was still possible.

Table 5-1

Mean and standard deviation (SD) of the study variables (N=58)

Time	Variable	Training		Control		T-test (df=56)	
		Mean	SD	Mean	SD	t	p
T1	Increasing job resources	3.46	.47	3.65	.55	1.44	.16
T2	Increasing job resources	4.05	.54	3.57	.55		
T1	Increasing job demands	3.23	.70	3.29	.77	.32	.75
T2	Increasing job demands	3.23	.64	3.20	.63		
T1	Decreasing job demands	2.03	.52	2.02	.59	-.11	.91
T2	Decreasing job demands	2.41	.57	2.16	.48		
T1	Work engagement	4.10	.74	4.00	.62	-.59	.56
T2	Work engagement	4.68	.74	4.07	.67		
T1	Disengagement	2.00	.41	2.13	.47	1.31	.26
T2	Disengagement	1.87	.37	2.21	.40		
T1	Positive mood	5.23	.81	5.30	.88	.29	.77
T2	Positive mood	5.85	.71	5.33	.79		
T1	Adaptive performance	2.95	.97	3.06	.85	.43	.67
T2	Adaptive performance	3.70	.93	3.14	.93		
T1	Task performance	4.10	.40	4.15	.45	.46	.65
T2	Task performance	4.27	.32	4.13	.44		

Table 5-2 shows the correlations between the variables at T1 and T2. As expected some high correlations can be observed. This is due to high stability between variables.

Table 5-2

Correlations among the study variables at the two measurement occasions

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1. T1 IncResources	-																1
2. T2 IncResources	.47**	-															6
3. T1 IncDemands	.53**	.31*	-														
4. T2 IncDemands	.46**	.34**	.87**	-													
5. T1 DecDemands	-.12	-.10	-.03	.06	-												
6. T2 DecDemands	-.10	.01	.08	.08	.73**	-											
7. T1 Workengagement	.35**	.26*	.33**	.40**	-.10	-.08	-										
8. T2 Workengagement	.20	.57**	.21	.31*	.04	.07	.73**	-									
9. T1 Disengagement	-.47**	-.44**	-.45**	-.50**	.17	.19	-.78**	-.70**	-								
10. T2 Disengagement	-.33*	-.57**	-.27*	-.41**	.01	.05	-.65**	-.80**	.85**	-							
11. T1 Moodpositive	.43**	.19	.23	.23	-.08	-.03	.69**	.51**	-.58**	-.46**	-						
12. T2 Moodpositive	.22	.54**	.08	.12	-.01	-.13	.41**	.73**	-.51**	-.66**	.56**	-					
13. T1 Adaptive performance	.20	.02	.16	.13	-.19	-.25	.11	.01	-.18	-.11	-.09	-.03	-				
14. T2 Adaptive performance	.14	.26	.12	.08	-.08	-.02	.03	.27*	-.15	-.26	.00	.30*	.65**	-			
15. T1 Workperformance	.28*	.23	-.01	-.03	-.26*	-.26	.34**	.18	-.32*	-.25	.40**	.32*	.10	.04	-		
16. T2 Workperformance	.03	.14	-.22	-.17	-.17	-.13	.18	.33*	-.24	-.32*	.29*	.43**	.08	.22	.58**	-	

N=58. T=Time

* p<.05; ** p<.01.

An important test is Box's Test of Equality of Covariance Matrices. The results of this test are shown in Table 5-3.

Table 5-3

Box's test of equality of covariance matrices

Box's Test of Equality of Covariance Matrices	p-value
Increasing job resources	0.046
Increasing job demands	0.003
Decreasing job demands	0.031
Work engagement	0.134
Disengagement	0.382
Positive Mood	0.102
Task performance	0.467
Adaptive Performance	0.507

According to this test not all results have $p > 0.05$ as preferred for a repeated measure GLM. SPSS gives two rows of output for each GLM analysis. For increasing job demands and decreasing job demands it will be important to use a different row of SPSS. The other variables score $p > 0.05$ as preferred and normal analysis row can be used to test the hypotheses. The outcomes of these analyses are given in the next paragraph. The result of each hypothesis is given separately.

5.2 The effects on job crafting measures

Repeated measures showed whether changes in job crafting measures were achieved. Table 5-4 shows the results of these tests.

Table 5-4

Output repeated measures GLM for job crafting variables

Variable	SS	df	MS	F	p	partial η^2
Increasing job resources	3.24	1	3.24	29.49	0.000	0.345
Increasing job demands	0.06	1	0.06	1.03	0.314	0.018
Decreasing job demands	0.38	1	0.38	4.99	0.029	0.082

From these results it can be concluded that the intervention showed a significant difference for increasing job resources. Evidence is provided for hypothesis 1 ($F = 29.49$, $p < .001$), the expectation that participants in the intervention group will experience

higher levels of increasing job resources in the follow up compared with participants in the control group. This change can be observed in Figure 5-1.

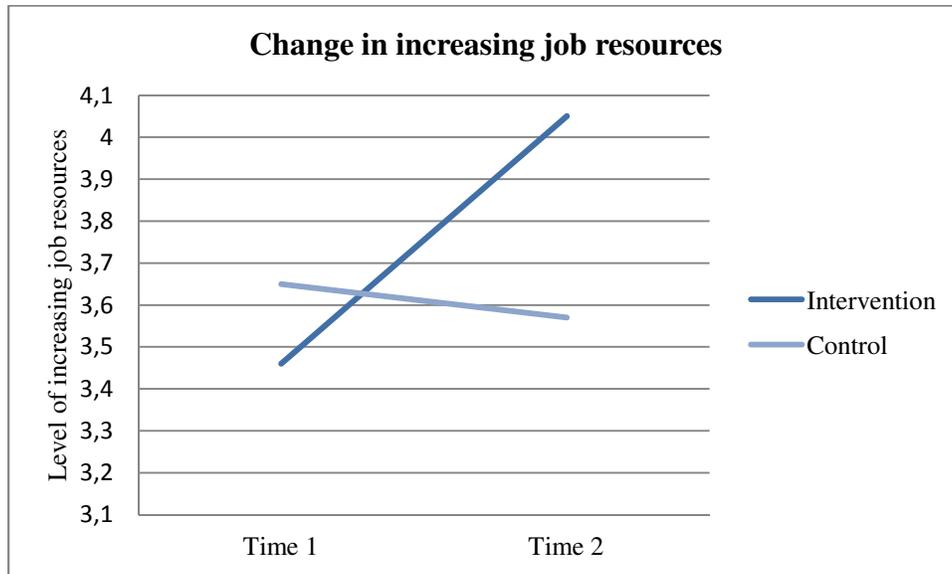


Figure 5-1 Change over time in increasing job resources

No significant result is found for hypothesis 2 ($F = 1.03$, $p = .31$), participants in the intervention group will experience higher levels of increasing job demands in the follow up compared with participants in the control group.

The analysis provided evidence that the intervention showed a significant difference for decreasing job demands. This supported hypothesis 3 ($F = 4.99$, $p < .05$), participants in the intervention group will experience higher levels of decreasing job demands in the follow up compared with participants in the control group. This change can be observed in Figure 5-2.

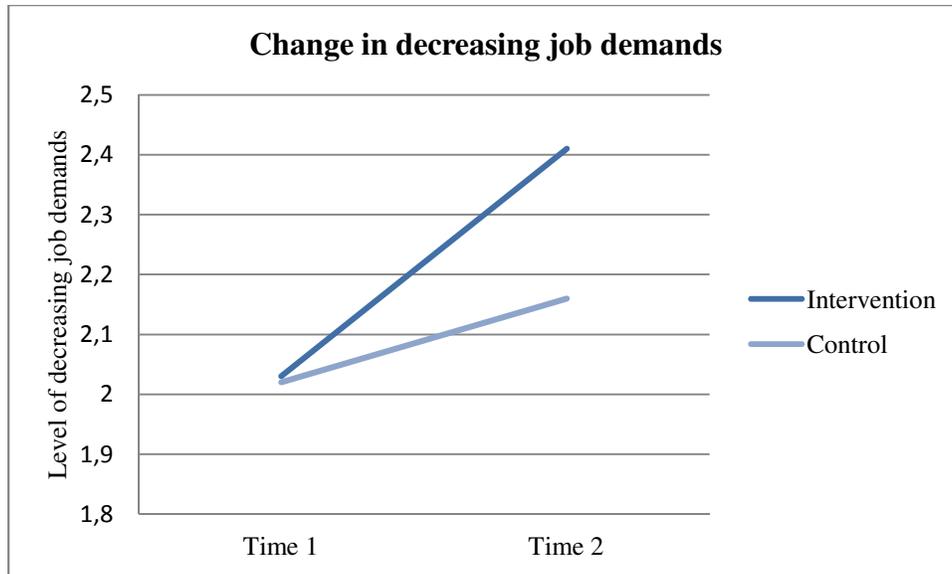


Figure 5-2 Change over time in decreasing job demands

This means that the intervention partially increased job crafting behavior under nurses. The intervention improved crafting job resources and increasing job demands. No improvement is found for decreasing job demands.

5.3 The effects on outcomes variables

Repeated measures showed whether changes in outcome variables were achieved. Table 5-5 shows the output results of the analysis.

Table 5-5
Output repeated measures GLM for outcome variables

Variable	SS	df	MS	F	p	partial η^2
Work engagement	1.82	1	1.82	15.51	0.000	0.217
Disengagement	0.30	1	0.30	13.52	0.001	0.194
Positive Mood	2.44	1	2.44	9.73	0.003	0.148

Hypothesis 4 expected that participants in the intervention group will experience higher levels of work engagement in the follow up compared with participants in the control group. For the analysis of this hypothesis, T1 work engagement and T2 work engagement were computed and used as within-subjects independent variables.

Table 5-5 displays significant evidence that work engagement showed a change between measure 1 and 2 for the intervention group, compared with the control group. The control group only had a small positive change over time. Analysis provided significant evidence that the observed change in work engagement is an effect of the job crafting intervention, which confirms hypothesis 4 ($F = 15.51, p < .001$). This change can be observed in Figure 5-3.

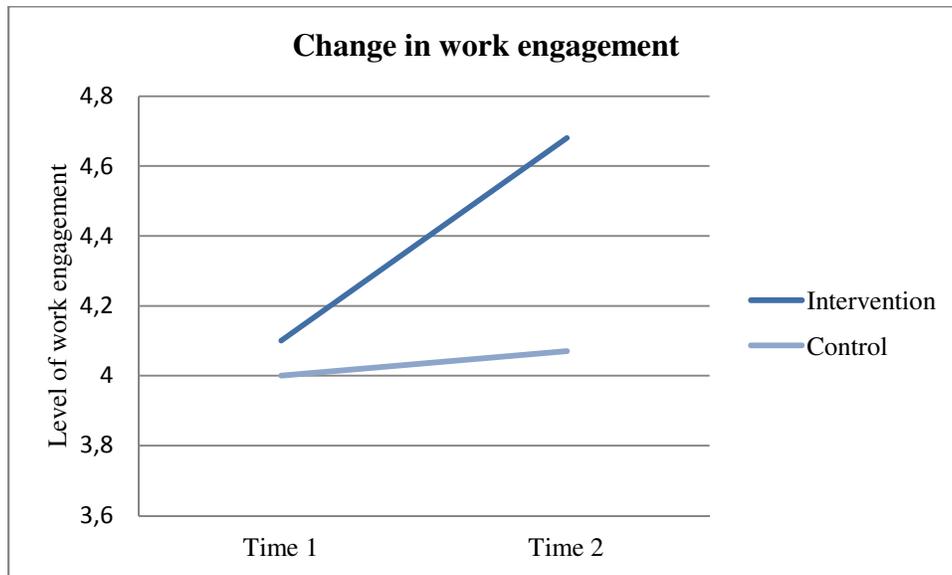


Figure 5-3 Change over time in work engagement

Hypothesis 5 expected participants in the intervention group will experience lower levels of disengagement in the follow up compared with participants in the control group. For this analysis, T1 disengagement and T2 disengagement were computed and used as within-subjects independent variables.

Table 5-5 already shows that disengagement has changed over time. The job crafting intervention group perceived a lower level of disengagement after the intervention than before. For the control group there is a small increase in level of disengagement measured. Figure 5-4 gives an indication of the increase in level of disengagement for the control group and a decrease for the intervention group. Analysis provided evidence that this change in disengagement is related to the intervention, which confirms hypothesis 5 ($F = 13.52, p < .001$).

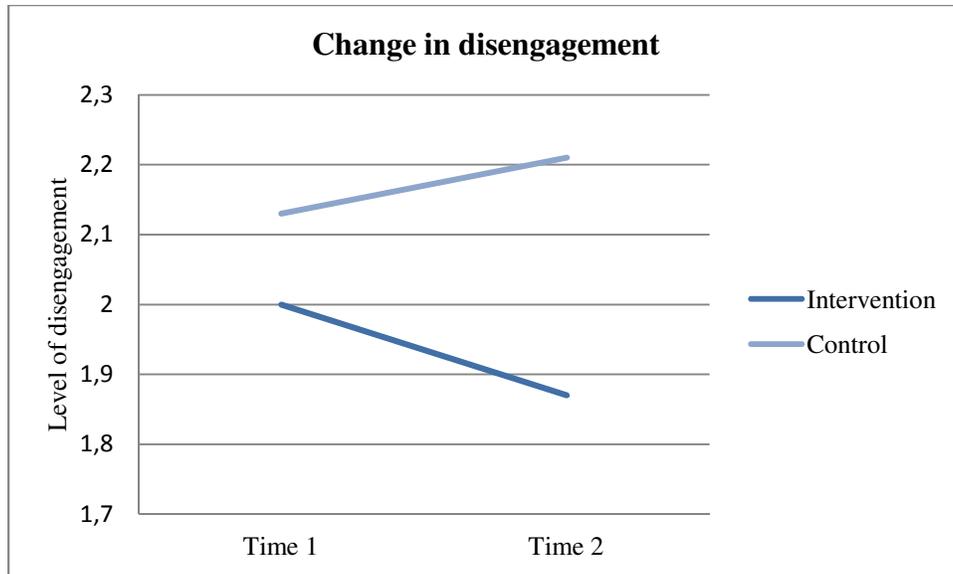


Figure 5-4 Change over time in disengagement

Hypothesis 6 hypothesized that participants in the intervention group will experience more positive emotions in the follow up compared with participants in the control group. To analyze this hypothesis, T1 positive mood and T2 positive mood were computed and used as within-subjects independent variables.

Table 5-5 shows an increase in positive mood over time for the intervention group compared with the control group. The control group does not show changes over time. Figure 5-5 shows the change in positive mood over time for the control and intervention group. Analysis provided significant evidence that the observed change in positive mood is an effect of the job crafting intervention, which confirms hypothesis 6 ($F = 9.73$, $p < .01$).

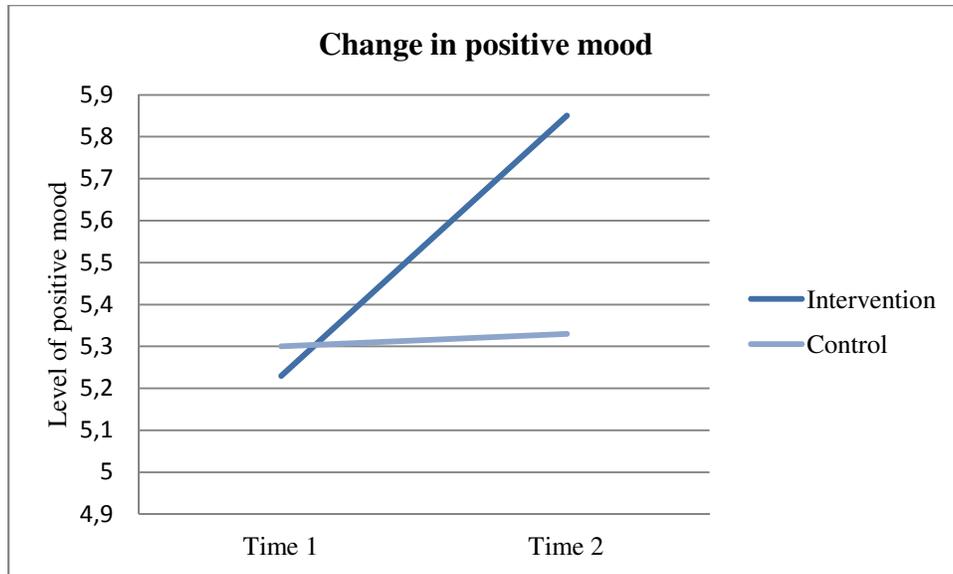


Figure 5-5 Change over time in positive mood

5.4 Mechanisms job crafting measures

Work engagement, disengagement and positive mood were analyzed to uncover which job crafting measures are causing the change which was found. The outcome of the analysis can be found in Table 5-6.

Hypothesis 7 expected that the increase in job crafting measures will be positively related to individual changes in levels of work engagement in post measures, after controlling for pre measures. Therefore a regression model is set up with T2 workengagement as dependent variable and T1 workengagement as controlling variable.

As shown in Table 5-6, not all job crafting measures are significantly related to the change in work engagement at time 2. Increase in job resources is significantly related to the change in work engagement, but this is not significant for increase in job demands and decrease in job demands. Hypothesis 7 is partially confirmed.

Hypothesis 8 is that the increase in job crafting measures will be negatively related to individual changes in levels of disengagement in post measures, after controlling for pre measures. A regression model is set up with T2 disengagement as dependent variable and T1 disengagement as controlling variable.

The results show that differences in job resources and job demands are significant related to change of levels in disengagement, but decrease of job demands is not. Therefore, hypothesis 8 is partially supported.

Hypothesis 9 proposed that the increase in job crafting measures will be positively related to individual changes in levels of positive emotions in post measures, after controlling for pre measures. For testing this analysis a regression model with T2 positive emotions as dependent variable and T1 positive emotions as controlling variable is designed.

The change in increasing job resources and decreasing job demands are significantly related to the change in T2 positive emotions controlling for T1 positive emotions. Increasing job demands is not significantly related to T2 positive emotions. Therefore, there is partial support for hypothesis 9.

Table 5-6

Output blocked regression job crafting measures for outcome variables

Step		T2 Work engagement		T2 Disengagement		T2 Positive mood	
		B (SE)	β	B (SE)	β	B (SE)	β
1	(Constant)	1.11*		.36*		2.85**	
		(.42)		(.14)		(.55)	
	T1 Variable	0.81**	.73	0.81**	.85	.53**	.56
		(.10)		(.07)		(.10)	
2	(Constant)	0.87*		.40**		2.16**	
		(.34)		(.12)		(.42)	
	T1 Variable	0.83**	.75	.80**	.85	.65**	.69
		(.08)		(.06)		(.08)	
Δ	Increase JR	0.60**	.45	-.17**	-.23	.77**	.57
		(.10)		(.05)		(.12)	
Δ	Increase JD	-0.02	-.01	-.17*	-.14	-.25	-.11
		(.17)		(.08)		(.19)	
Δ	Decrease JD	-0.07	-.04	.03	.03	-.62**	-.32
		(.15)		(.07)		(.17)	
		Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
		R2=0.53	R2=0.73	R2=0.72	R2=0.81	R2=0.32	R2=0.65

Note: N=58; Δ =Difference between T1 and T2; JR=Job resources; JD=Job demands
* p<.05; ** p<.01.

5.5 Adaptive performance/performance

The final objective of the study is to improve adaptive performance and task performance. The output of the analysis for these two variables is given in Table 5-7.

Table 5-7
Output repeated measures GLM for performance

Variable	SS	df	MS	F	p	partial η^2
Adaptive performance	3.16	1	3.16	12.30	.001	.180
Performance	.251	1	.251	3.83	.055	.064

Hypothesis 10 expected that participants in the intervention group will experience a higher adaptive performance in the follow, up compared with participants in the control group. Within-subjects independent variables T1 adaptive performance and T2 adaptive performance were computed for this analysis.

Table 5-7 gives an indication of change in adaptive performance for the intervention group compared with the control group. The control group almost has the same values on both time measures. The change in adaptive performance can be found in Figure 5-6. Analysis provided significant evidence that the observed change in adaptive performance is an effect of the job crafting intervention, which confirms hypothesis 10 ($F = 12.30$, $p < .001$).

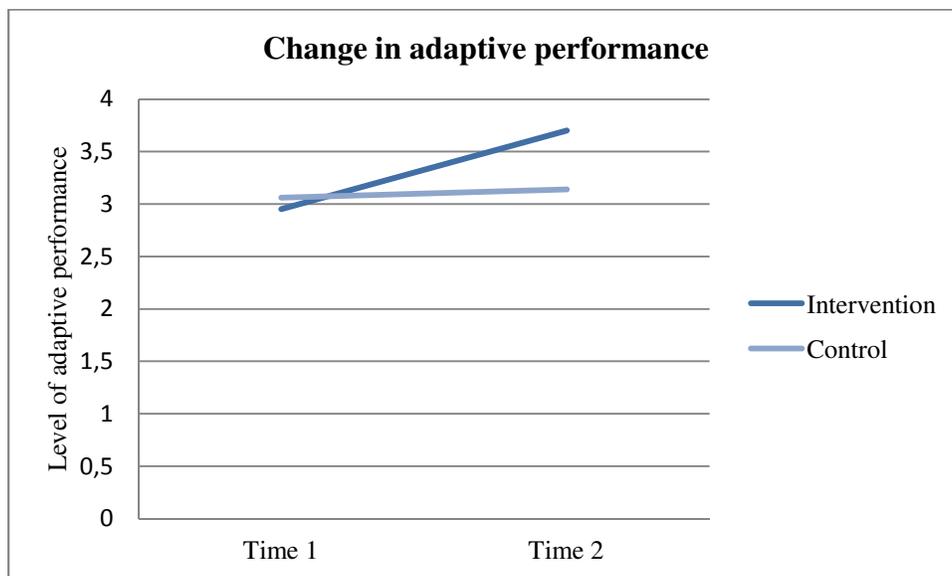


Figure 5-6 Change over time in adaptive performance

Hypothesis 11 expected that participants in the intervention group will experience a higher task performance in the follow up, compared with participants in the control group. Within-subjects independent variables T1 task performance and T2 task performance were computed for this analysis.

Table 5-7 gives an indication of change in adaptive performance for the intervention group compared with the control group. The control group almost has a small decrease in task performance and the intervention group has a small increase in task performance. The change in task performance can be found in Figure 5-7. Although a trend is visible, strictly speaking, no evidence is provided that the observed change in task performance is an effect of the job crafting intervention Hypothesis 11 is not confirmed ($F = 3.83$, $p = .06$).

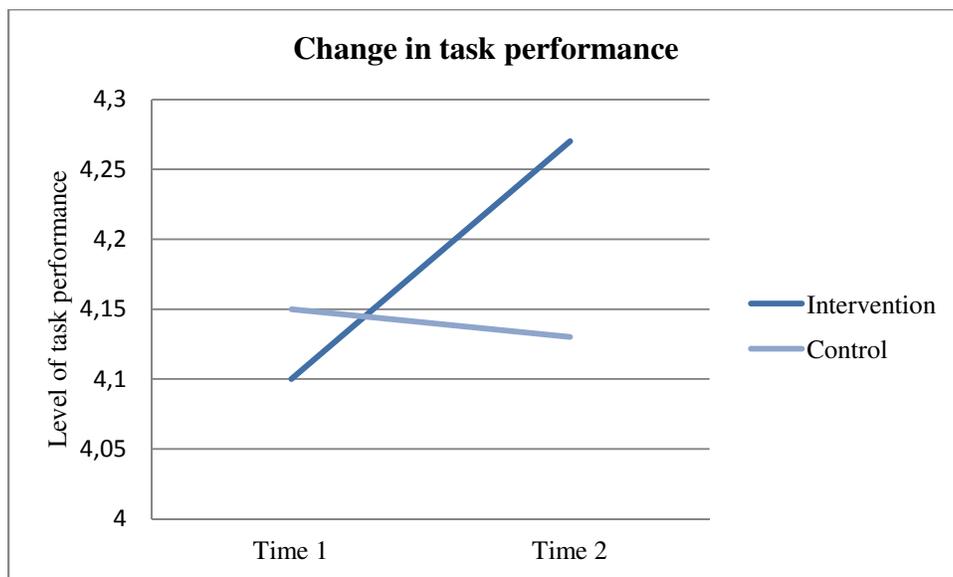


Figure 5-7 Change over time in task performance

The change in performance can also be investigated by the measurement density. This key performance indicator explains which percentage of patients older than 70 years old is screened. The results can be found in Table 5-8. Measurement density average in % gives the average result of each department for the twelve months before the intervention started. May 2012 and June 2012 gives the results of the measurement density in % of both months.

Table 5-8
Measurement density of intervention group

Measurement density in %	1B	3E	4B
Measurement density average	59.6	9.8	46.1
Measurement density May 2012	60.4	40.0	79.1
Measurement density June 2012	56.5	53.8	82.2

Table 5-8 shows the results of the three departments which were involved in the intervention. From this table can be concluded that there is an improvement on two departments. One department has not changed over time on the key performance indicator.

The changes found in hypothesis 10 and 11 are analyzed for job crafting measures. The output can be found in Table 5-9.

Table 5-9
Output blocked regression job crafting measures for performance

Step		T2 Adaptive performance		T2 Task performance	
		B (SE)	β	B (SE)	β
1	(Constant)	1.39** (.34)		2.03** (.42)	
	T1 Variable	.69** (.11)	.65	.53** (.10)	.58
2	(Constant)	1.08** (.35)		1.99** (.42)	
	T1 Variable	.73** (.10)	.69	.53** (.10)	.58
Δ	Increase JR	.43* (.17)	.25	.05 (.08)	.07
Δ	Increase JD	-.23 (.28)	-.09	.17 (.13)	.16
Δ	Decrease JD	.21 (.25)	.09	.08 (.11)	.09
		Model 1 R2=0.42	Model 2 R2=0.50	Model 1 R2=0.33	Model 2 R2=0.37

Note: N=58; Δ=Difference between T1 and T2; JR=Job resources; JD=Job demands

* p<.05; ** p<.01.

Hypothesis 12 is that the increase in job crafting measures will be positively related to individual changes in levels of adaptive performance in post measures, after controlling for pre measures. T2 adaptive performance was used as dependent variable, while controlling for T1 adaptive performance. In this analysis, it was found that increasing job resources is significantly related to changes in T2 adaptive performance. Increase or decrease in job demands is not significantly related to T2 adaptive performance. Therefore hypothesis 12 is partially supported.

Hypothesis 13 is that the increase in job crafting measures will be positively related to individual changes in levels of task performance in post measures, after controlling for pre measures. T2 Task performance was used as dependent variable while controlling for T1 task performance. In this analysis it was found that none of the three job crafting behaviors is significantly related to changes in T2 task performance. Therefore, hypothesis 13 is not supported.

Finally, changes in work engagement and changes in performance is analyzed. The results can be found in Table 5-10.

Table 5-10
Output blocked regression work engagement for performance

Step		T2 Adaptive performance		T2 Task performance	
		B (SE)	B	B (SE)	β
1	(Constant)	1.39** (.34)		2.03** (.42)	
	T1 Variable	.69** (.11)	.65	.53** (.10)	.58
2	(Constant)	.95** (.29)		1.70** (.39)	
	T1 Variable	.75** (.09)	.71	.59** (.09)	.64
Δ	Workengagement	.77** (.15)	.43	.25** (.07)	.35
		Model 1 R2=0.42	Model 2 R2=0.607	Model 1 R2=0.33	Model 2 R2=0.45

Note: N=58; Δ =Difference between T1 and T2
* p<.05; ** p<.01.

Hypothesis 14 is that the increase in work engagement will be positively related to individual changes in levels of adaptive performance in post measures, after controlling for pre measures. Work engagement is significant in the blocked regression model. This gives evidence for the expectation that a positive change in work engagement is positively related to a positive change in adaptive performance. Therefore, hypothesis 14 is supported.

Hypothesis 15 expected the increase in work engagement to be positively related to individual changes in levels of task performance in post measures, after controlling for pre measures. The output in Table 5-10 shows a significant result for work engagement. It supports the expectation that a positive change in work engagement is related to a change in task performance. This supported hypothesis 15.

6 Conclusions and discussion

In this chapter, conclusions and discussion of the results are presented. After the conclusions, theoretical implications and limitations are discussed. Hereafter, practical implications are given. Finally, ideas for future research and a final conclusion are given.

6.1 Conclusions

The central problem in the current study was improving adaptive performance and well-being (i.e. higher work engagement, lower disengagement and more positive emotions) of employees. This is needed to improve implementations of new or optimized processes. Employees are confronted with changes in processes, and are expected to change their working behavior and perform better.

The Elkerliek hospital is an organization which is working on their processes to stay ahead of competitors. Especially the nurses are being confronted with the changes in these processes. The implementation of delirium screening is a change in a work process. In the current study, adaptive performance was described as the response to four aspects of delirium screening. The first aspect was using the screening in the quality questionnaire to predict risk of delirium. The second aspect was using the checklist in the care chart. Third, was using preventative actions and treatment interventions in the daily job. Fourth, focus on achieving high measurement densities for delirium. It was expected that changing job resources and job demands by job crafting would improve their adaptive performance and well-being.

The analysis showed support for the effect of the intervention on job crafting behavior. Especially, increasing job resources and decreasing job demands were used as a tool to improve well-being and adaptive performance. The intervention showed significant results for positive change in these two aspects of job crafting. As a result, work engagement and positive mood changed positively, disengagement changed negatively. This means that there is higher work engagement and more positive mood, and less feelings of disengagement. The intervention also significant increased adaptive performance. Job crafting behavior resulted in a positive change in adaptive performance.

This study showed that increasing job resources is an important mechanism in increasing adaptive performance.

Figure 6-1 shows the results of the intervention with respect to significance levels.

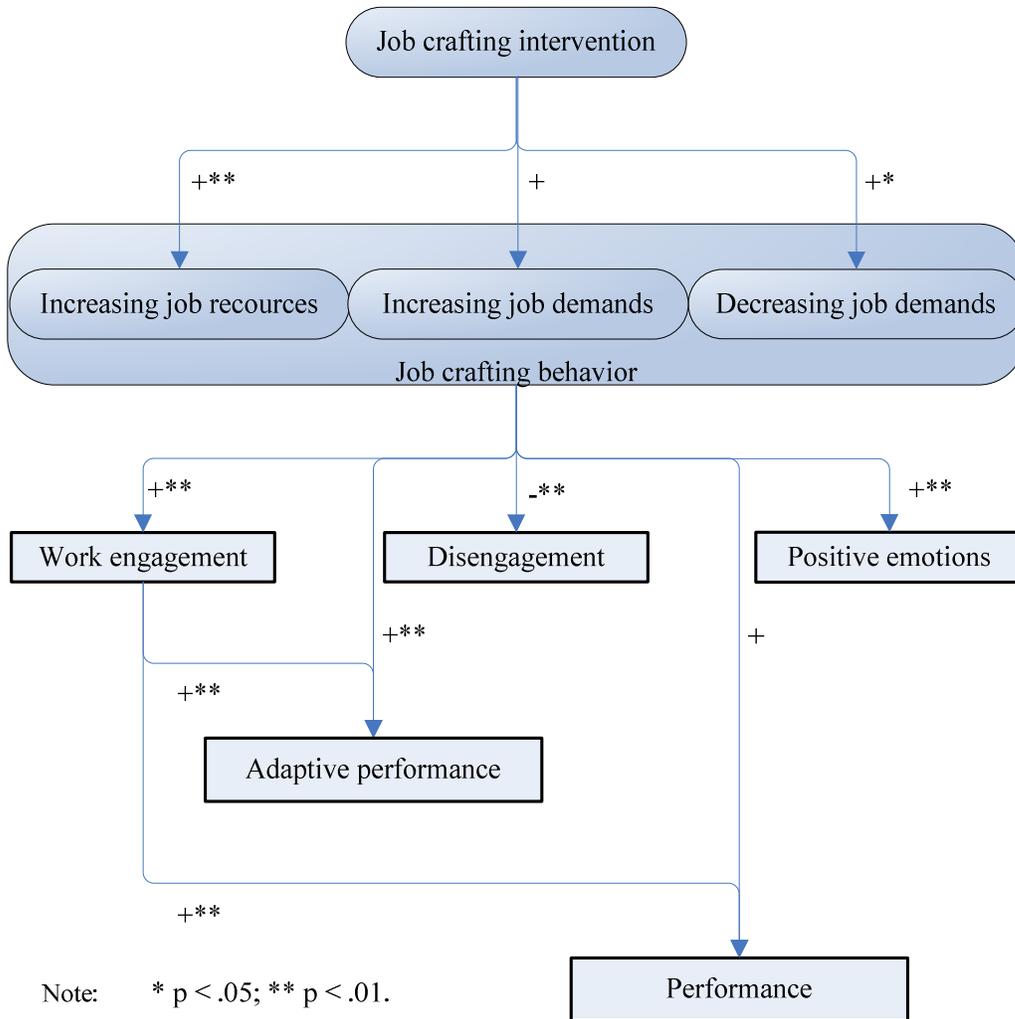


Figure 6-1 Research model of the current study, including significant results

6.2 Theoretical implications

In this paragraph, the theoretical implications of the current study will be discussed. Findings are presented following the model presented in Figure 6-1. The order will be the intervention, the outcome variables for well-being, mechanisms, and adaptive performance.

The intervention

The current study implemented an intervention to increase job crafting behavior. This intervention was based upon an intervention of Van den Heuvel et al. (2012). The current intervention started with a job crafting workshop which resulted in every nurse making a personal crafting plan to put into practice. As a result job crafting behavior increased. This result is in line with previous research on a job crafting intervention (van den Heuvel et al., 2012).

There was a significant increase in increasing job resources and decreasing hindering job demands. The focus of the intervention was on increasing job resources and decreasing job demands, so the results were in line with expectations. There was no support for increasing challenging job demands. Due to high work pressure and lower levels of control, this type of job crafting behavior was not included in the intervention.

The outcome variables

The change in job crafting behavior was expected to enhance work engagement and decrease disengagement. There was a significant result for the change in work engagement and disengagement for the intervention group compared to the control group. Nurses of the intervention group experienced higher levels of work engagement and lower levels of disengagement compared with the nurses of the control group. These findings on work engagement and disengagement are in line with previous research. According to Wrzesniewski and Dutton (2001) job crafting changes psychological meaningfulness of the work and increases the feeling of being valuable at work making an employee feel more worthwhile. According to Ghitulescu (2007) relational crafting can increase affective outcomes like job satisfaction and organizational commitment. Other results show that employees are more engaged on days that employees undertake increasing job demands (Petrou et al., 2012). The findings of the current study can be explained by the same mechanisms of previous research. The increase in work engagement can be explained by the increase in job resources, like previous research (Schaufeli, Bakker, & Rhenen, 2009). A previous job crafting intervention found no significant result, but a positive trend for work engagement (van den Heuvel et al., 2012), which is in line with this study. Evidence suggests that a job crafting intervention can

increase work engagement and lower disengagement, shown by previous research on job crafting.

The job crafting intervention was expected to improve positive mood. The current study provided evidence that higher levels of positive mood are experienced by the intervention group compared with the control group. These results on positive mood are in line with previous research. Fritz and Sonnentag (2009) did a four day survey on job stressors and proactive behavior and they showed that job stressors and positive mood are positively associated with proactivity on the same workday and positive mood also for the following day. In a multilevel analysis of Sonnentag (2003) it can be concluded that a part of job crafting was positively related to work engagement and proactive behavior during the subsequent work day. A previous study on a job crafting intervention found a significant result for change in positive emotions (van den Heuvel et al., 2012).

The results of this study suggest that a job crafting intervention can achieve the same results on job crafting. Employees who participated the intervention, experienced more positive mood than the control group. This was expected due to increase in job resources and decrease in hindering job demands. Employees were experiencing more influence on their own work, which resulted in more positive mood. Decreasing job demands gives opportunities to recover from work stress. Recover time is expected to contribute positively to positive mood and explains the findings of the current study.

Mechanisms

The current study found changes in work engagement, disengagement and positive mood. It is expected that job crafting behavior is the mechanism which explains the changes in outcome variables. Increasing job resources was significantly related to the changes of all three outcome variables. Increasing challenging job demands was significant for disengagement only. Decreasing hindering job demands was significantly related to changes in positive mood.

Increasing job resources was positively related to work engagement. This is also supported in previous research. Tims et al. (2012) conducted research on the relation

between increasing job resources and work engagement in which they provided support for the hypothesis that there is a positive link. Evidence is provided when job resources increase, work engagement tends to increase as well (Schaufeli et al., 2009). This is in line with results for work engagement. The current study has also found evidence for the positive relation between increasing job resources with positive mood and the negative relation with disengagement. These findings provide added information on the role of increasing job resources. This is an important aspect of job crafting, which influences how work is experienced. Previous research already showed that a lack of social support, which is part of job resources, is linked to burnout (Maslach, Schaufeli, & Leiter, 2001). The current study showed that increasing job resources can contribute positively to positive mood and reduce disengagement. The explanation for these findings can be found in the presence of job resources like social support from colleagues and supervisors. Other job resources which nurses had to focus on were getting feedback, look for trainings and invest in relationships with colleagues. These aspects have contributed to the changes in work engagement, disengagement and positive mood. Job resources will not always contribute to all these aspects of well-being. The current study was situated in high work pressure. A research conducted by Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) showed that increasing job resources are particularly relevant under stressful conditions. The explanation why the current study found that increasing job resources is positively related to the outcome variables can be explained by the fact that the nurses experience high work pressure. In these situations job resources can positively contribute to work experiences.

Increasing challenging job demands was significantly and negatively related to disengagement. This finding adds insights to the role of increasing challenging job demands. This aspect of job crafting can result in lower levels of disengagement. This is expected, because it gives an employee more freedom to fill in time at work. In literature, evidence is provided for a positive link between day –level seeking challenges and day –level work engagement (Petrou et al., 2012). They showed that employees are more engaged on days that they undertake to increase job demands and not decrease these demands.

Tims et al. (2012) conducted research on the relation between increasing job demands and work engagement. They provided support for the positive link between increasing challenging job demands and work engagement. This finding is not supported in this study. There is no significant link between increasing challenging job demands and work engagement. The explanation is that nurses already experience a high workload and low job autonomy and as a result do not feel for increasing challenging job demands. Increasing challenging job demands is only an appropriate strategy when there is no high work pressure. It is important for a nurse to first have sufficient control over their work, before increase challenging demands is used as a strategy (Maslach et al., 2001). Therefore, in the current study this strategy was not included in the personal crafting plan.

Decreasing hindering job demands was significantly and negatively related to changes in positive mood. This finding gives new insights in the role of decreasing hindering job demands. During the intervention, nurses focused on decreasing job demands by working more efficient, simplifying tasks, and making clear appointments. These aspects contributed to the results found. It was expected that this aspect of job crafting also increased work engagement, but this is not supported in this study. This is different from the findings of Tims et al. (2012) who provided support for the hypothesis that decreasing hindering job demands was related to work engagement. It also is not in line with Ghitulescu (2007), who found that there was a positive relationship between task crafting and commitment. In previous research cynicism is indicated as a predictor of using decreasing job demands as a strategy (Tims et al., 2012). It seems to be that employees who scored high on cynicism were more likely to undertake decreasing job demands as a strategy to improve well-being. The current study did not measure cynicism, but this can explain the difference in results. Discretion and task crafting had a positive significant impact on task crafting in previous research (Ghitulescu, 2007). The current study included an experienced group of nurses in the intervention. This can explain why the current study also found positive effects for decreasing job demands. The control group did not have as many years experience as the intervention group. Different results could have been found when the intervention group was switched with the control group.

Disengagement is predicted by job demands, but also by the lack of job resources (Schaufeli et al., 2009). It is not significantly related to decreasing hindering job demands in the current study. This can be caused by the assumption that nurses do experience high workload and low job autonomy and as a result are not able to decrease hindering job demands to lower disengagement.

In conclusion, increasing job resources plays an important role in work experience for nurses. The intervention focused on this aspect of job crafting for two weeks, and the results are in line with the expectation. Increasing challenging job demands is only significant for disengagement, and decreasing hindering job demands only for positive mood.

Adaptive and task performance

The current study found evidence that the job crafting intervention positively changed adaptive performance. Nurses of the intervention group engaged more in process changes, in the current study delirium screening. The current study focused on four aspects of delirium screening, which are using the screening in the quality questionnaire; using the checklist; using preventative actions and treatment interventions; focus on achieving high measurement densities for delirium. The intervention group scored higher on these four aspects compared with the control group. This is in line with previous research. Petrou et al. (2012) showed that there is a link between job crafting and organizational change. The job crafting intervention seems to help employees to undergo organizational changes and give opportunities to adapt to these changes. Nurses of the intervention group seem to show less resistance and more willingness to implement the delirium screening.

Significance levels were nearly reached for the expectation that participants in the intervention group will reach higher levels of task performance in the follow up compared with participants in the control group. This is in line with previous research to a large extent. It predicted that employees who increased job resources and job demands were rated as higher performers and significant evidence for the positive link between job

crafting and job performance was found (Tims et al., 2012). Other researchers concluded that increasing resources and challenging demands are positively linked to new clients and therefore can be related to turnover (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). The current study partly supported these findings. By taking the key performance indicator into account, can be concluded that performance is partially improved. The results showed that there was one out of three departments which did not change on the key performance indicator. An explanation can be that this department does not focus on achieving high measurement densities for delirium. Task performance did not increase significantly, and this can be explained by having one out of three departments not working on filling in the screening for delirium.

In the current study, it was expected that the increase in job crafting measures was positively related to individual changes in levels of adaptive performance and performance in post measures after controlling for pre measures. There was support for the link between increasing job resources and adaptive performance. This is partially in line with previous research. Literature suggested that increasing resources and challenging demands are positively linked to new clients (Petrou et al., 2012). Petrou et al. (2012) also showed that there is a link between job crafting and organizational change. The current study only suggests that changes in increasing job resources are related to adaptive performance. The explanation for these findings can be found in the presence of job resources, like having feedback, looking for trainings and investing in relationships with colleagues. This strategy helped the nurses to cope with changes, which is seen in previous research (Bakker et al., 2007). It provided innovativeness and a supportive climate. Nurses were better able to change and make use of delirium screening. Performance is not directly linked to job crafting. An explanation for this finding can be that increasing job resources is not directly stimulating task performance, but through a mechanism like increased work engagement. Decreasing job demands can even be seen as lower task performance, and therefore this is not linked with higher task performance. This finding is interesting, because this means that the change in performance is not a result of job crafting, but probably a result of other changes. Therefore analysis was conducted on the influence of work engagement on task performance.

In this study the relation between work engagement with adaptive performance and performance was also researched. The expectation was that the increase in work engagement was positively related to individual changes in levels of adaptive performance and performance in post measures after controlling for pre measures. Evidence is provided for both hypotheses. These findings are in line with Avey et al. (2008) who provided evidence for the hypothesis that the psychological capital of positive employees may be an important contribution to positive organizational change. Engagement is more than simple satisfaction, but is related to this openness and loyalty of an employee (Macey & Schneider, 2008). The findings of the current study are also in line with the idea that openness to change is strongly related to adaptive performance (Griffin et al., 2007). The suggesting is that if work engagement increases, adaptive performance and performance increases. The underlying explanation is that higher work engagement result in higher loyalty of employees. Employees are more open to innovation and changes. Therefore work engagement is an important aspect if adaptive performance must be improved.

6.3 Limitations

There is not much literature available on the effect of job crafting interventions, and therefore this study differs from previous research. The outcomes of this study are generally in line with previous research, but the results of this study are limited to a certain extent. Therefore limitations are presented in this paragraph.

In the first place generalization of the results is complicated. This is due to the small sample size and furthermore due to the drop out. One explanation is that nurses with high motivation stayed committed to the job crafting intervention, and this suggests an overestimation of the real effect (Bakker, Taris, & de Jonge, 2003). Furthermore, generalization across groups is not appropriate. This research is conducted for a specific group of employees, namely nurses in a hospital. Therefore, it might be difficult to generalize the results for other employees and work environments (Bakker et al., 2003).

A second limitation is that the participants were not randomly assigned to the control or intervention group. In total nurses of three departments were chosen to participate in the intervention, and nurses of three similar departments were chosen to participate in the control group. This might have influenced the results. By using randomization, it is expected that placebo effects, confounders, and measurement weaknesses are cancelled out. To minimize the effect of no randomization, similar departments were chosen to participate in the intervention and control group. Still, there is a difference in mean age and work experience.

A third limitation is the possibility of a test effect (Bakker et al., 2003). Change in measurements in the second questionnaire can be a consequence of asking a question in the first questionnaire. Questions of the first measurement make employees aware of their behavior and this can already change behavior for the second measurement. Therefore, the questionnaire of the first measurement was formulated in a different order than the second measurement. The name of the study was a job crafting intervention, which is not directed at some expected outcome variable. Measurement density is a key performance indicator of the Elkerliek hospital which is used next to the questionnaires to validate the results on task performance.

A fourth limitation is that due to time constraints only two measurements are conducted, a premeasured and a post measure which was four weeks after the job crafting training. The long term effect is not measured in this study, and this is a limitation. Important to mention is that measurements can vary over time, and the measurement of a long term effect can be influenced by many variables, so this is not always an advantage over two time measurements.

6.4 Practical implications

Also practical implications result from the current study. Looking back to the Job Demands-Resources model of Bakker and Demerouti (2007), it was expected that job demands and job resources would influence employee well-being. Therefore a job crafting intervention was set up. Job crafting behavior included changing job demands

and job resources and therefore was expected to change employee well-being and performance. The current study showed that job crafting can have a positive influence on a couple of outcome variables, like work engagement and adaptive performance.

First implication is that organizations can make use of these findings to improve the implementation of organizational changes. An intervention to improve job crafting behavior resulted in higher levels of adaptive performance. In times of crisis, processes are changed on almost daily basis. Job crafting is a usable tool to help employees to undergo changes in organizations. Introduction in organizations is important to learn employees undertake job crafting activities. Employees should be aware of this job crafting tool. The effect of job crafting can be positive for employee and organization, but therefore open communication is needed (Berg et al., 2008). By means of communication a shared understanding of job crafting can be built and an employee is supported to undertake job crafting activities. They also should be able to make use of it. Employees can generate their own positive feedback by being friendly to customers, so that they are more likely to give positive reactions (Schaufeli, Taris, Le Blanc, Peeters, Bakker, & De Jonge, 2001). The current study focused on increasing job resources and decreasing job demands, which both influenced employee well-being (i.e. higher work engagement, lower disengagement and more positive emotions) and performance.

The most promising strategy is increasing job resources. This strategy includes social support from colleagues and supervisors, getting feedback, look for trainings and invest in relationships with colleagues. Analyses showed that building job resources improved well-being and outcome variables the most. The current study used a job crafting strategy, but it is important to mention that this is not the only way to improve job resources. Building job resources can be executed solely, without the combination of working on job demands.

Employees may be able to experience a higher workload if they feel they contribute to something important, or if they are well-rewarded (Maslach et al., 2001). The organization itself can influence these feelings by giving positive feedback and

appropriate rewards. For example, if supervisors become more aware of job resources like positive feedback to employees, the organization can contribute to building job resources (Schaufeli et al., 2009). The organization should provide the right resources to employees to handle job demands (Maslach et al., 2001).

6.5 Future research

The current study gives insight in the use of a job crafting intervention, to improve adaptive and task performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions). The job crafting intervention focused mainly on increasing job resources, and nurses were more able to use this type of job crafting behavior. More research on increasing job resources through an intervention is needed to get more insight in the specific parts of interventions which can increase this behavior.

The intervention also focused on decreasing job demands. This job crafting behavior was also improved by the intervention. It would be interesting to do more research on the specific working of an intervention to improve decrease job demands behavior.

The current intervention did not focus on increasing job demands, due to already high work pressure. For future research, it is advised to see in what situations employees are able to increase job demands to improve well-being and performance.

Moreover, job crafting behavior resulted in positive outcomes for employee and organization. The main results were in line with previous research, but there were also differences found. More research is needed to investigate in which situations job crafting will result in the expected outcomes. Furthermore, it is important to research further which strategy is the most appropriate in which situation. In the current research is found that due to high work pressure, increasing job demands was not effective. Important aspects to research are for example discretion. Discretion is a measure of the level of control that an employee has (Ghitulescu, 2007). It offers more degrees of freedom in performing a job and it enables an employee to better fit the job with skills and preferences.

Finally, more research is needed to develop a job crafting intervention usable for all organizations at all times. This study partially improved job crafting behavior, and more improvement can be achieved if the intervention is more effective. Job crafting intervention testing in other areas is needed before results can be generalized across groups. In the current study a smaller sample size is included, which makes it impossible to generalize the results.

6.6 Final conclusion

In conclusion, answers are provided on the core questions. Firstly a job crafting intervention, consisting of training and assignments, can be used as a tool to increase nurses' adaptive performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions) at work in general and specifically for the VMS safety program 'Fragile Elderly'. The intervention did increase job crafting behavior. As a result work engagement and positive mood were enhanced, disengagement decreased. In the end, adaptive performance was increased. For the hospital, this results in using the screening in the quality chart to predict risk on delirium; using the checklist in the care chart; using of preventative actions and treatment interventions in their daily job; and focusing on achieving high measurement densities for delirium.

Mainly increasing job resources is causing the changes found. The current study focused on increasing job resources during two weeks, and therefore this finding was expected. In some cases changing job demands was linked to changes in outcome variables. Changes in work engagement were also responsible for changes in adaptive performance.

To conclude, the current study showed that job crafting intervention is a usable tool to increase adaptive and task performance as well as well-being (i.e. higher work engagement, lower disengagement and more positive emotions). This is very important in a competitive market, where organizations face many changes to optimize their processes.

References

- Avey, J., Tara, S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, 44, 48-70.
- Bakker, A., & Demerouti, E. (2007). The Job Demands- Resources model: state of the art. *Journal of Managerial Psychology*, 22 (3), 309-328.
- Bakker, A., Hakanen, J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99 (2), 274-284.
- Bakker, A., Taris, T., & de Jonge, J. (2003). 10 Onderzoek binnen de psychologie van arbeid en gezondheid. In W. Schaufeli, A. Bakker, & J. d. Jonge, *De psychologie van arbeid en gezondheid* (pp. 217-240). Houten: Bohn Stafleu Van Loghum.
- Bateman, T., & Crant, M. (1999). Proactive Behavior: Meaning, Impact and Recommendations. *Business Horizons*, 42 (3), 63-71.
- Berg, J., Dutton, J., & Wrzesniewski, A. (2008). *What is job crafting and why does it matter?* Michigan: Center for positive organizational scholarship.
- Berg, J., Wrzesniewski, A., & Dutton, J. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31, 158-186.
- Brunstein, J., Schultheiss, O., & Grassman, R. (1998). Personal goals and emotional well-being: The moderating role of motive dispositions. *Journal of Personality and Social Psychology*, 75, 494-508.
- Christensen, C., Bohmer, R., & Kenagy, J. (2000). Will Disruptive Innovations Cure Healthcare. *Harvard Business Review*, (Sept-Oct), 1-11.
- Chu, A., & Choi, J. (2005). Rethinking procrastination: positive effects of "active" procrastination behavior on attitudes and performance. *Journal of Applied Psychology*, 145, 245-264.
- Demerouti, E., & Bakker, A. (2007). *Measurement of burnout and engagement*. Utrecht: Utrecht University.
- Demerouti, E., Bakker, A., Nachreiner, F., & Schaufeli, W. (2001). The Job Demands-Resources model of burnout. *Journal of Applied Psychology*, 86, 499-512.

- Demerouti, E., Bakker, A., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: a multitrait-multimethod analysis. *European Journal of Psychological Assessment, 18*, 296-307.
- Dieleman, M., Gerretsen, B., & van der Wilt, G. (2009). Human resource management interventions to improve health worker's performance in low and middle income countries: a realistic review. *Health Research Policy and Systems, 7*, 1-13.
- Dimitrov, D., & Rumrill, P. (2003). Pretest-posttest designs and measurement of change. *Work, 20*, 159-165.
- Elkerliek, E. h. (2012, 2 27). Problems at the Elkerliek. (J. v. Mersbergen, Interviewer)
- Fritz, C., & Sonnentag, S. (2009). Antecedents of day-level proactive behavior: A look at job stressors and positive affect during the workday. *Journal of Management, 35*, 94-111.
- Ghitulescu, B. (2007). *Shaping tasks and relationships at work: examining the antecedents and consequences of employee job crafting*. University of Pittsburgh.
- Griffin, M., Neal, A., & Parker, S. (2007). A new model of work role performance: Positive behavior in uncertain and independent contexts. *Academy of Management Journal, 50* (2), 327-347.
- Hakanen, J., Bakker, A., & Schaufeli, W. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*, 495-513.
- Hobfoll, S. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337-370.
- Hung, S.-Y., Hung, W.-H., Tsai, C.-A., & Jiang, S.-C. (2010). Critical factors of hospital adoption on CRM system: Organizational and information system perspectives. *Decision Support Systems, 48*, 592-603.
- Katwyk, P. v., Fox, S., Spector, P., & Kelloway, K. (2000). Using the Job-related Affective Well-being Scale (JAWS) to investigate affective responses to work stressors. *Journal of Occupational Health Psychology, 5*, 219-230.
- Lee, F. (1997). When the going gets tough, do the tough ask for help? Help seeking and power motivation in organizations. *Organizational Behavior and Human Decision Processes, 72*, 336-363.

- Liberman, N., Idson, L., Chen, Camacho, C., & Higgings, E. (1999). Promotion and prevention choices between stability and change. *Journal of Personality and Social Psychology*, 77, 1135-1145.
- Luthans, F., Avey, J., Avolio, B., Norman, S., & Combs, G. (2006). Psychological capital development: Towards a micro-intervention. *Journal of Organizational Behavior*, 27, 387-393.
- Macey, W., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1, 3-30.
- Mans, R., Schonenberg, M., Song, M., Aalst, W. v., & Bakker, P. (2008). Application of Process Mining in Healthcare - A Case Study in a Dutch Hospital. *Communications in Computer and Information Science*, 25, 425-438.
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *The Annual Review of Psychology*, 52, 397-422.
- Petrou, P., Demerouti, E., Peeters, M., Schaufeli, W., & Hetland, J. (2012). Crafting a job on daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, in press.
- Podsakoff, N., LePine, J., & LePine, M. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92, 438-454.
- Pulakos, E., Arad, S., Donovan, M., & Plamondon, K. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85 (4), 612-624.
- Salanova, M., & Schaufeli, W. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behavior. *The International Study of Human Resource Management*, 19, 116-131.
- Salanova, M., Agut, S., & Peiró, J. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service. *Journal of Applied Psychology*, 90, 1217-1227.
- Schaufeli, W., & Bakker, A. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.

- Schaufeli, W., & Bakker, A. (2003). *UWES- Utrecht Work Engagement Scale: Test Manuel*. Utrecht, The Netherlands: Department of Psychology, Utrecht University.
- Schaufeli, W., Bakker, A., & Rhenen, W. v. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, *30*, 893-917.
- Schaufeli, W., Salanova, M., Gonzales-Roma, V., & Bakker, A. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *The Journal of Happiness Studies*, *3*, 71-92.
- Schaufeli, W., Taris, T., Le Blanc, P., Peeters, M., Bakker, A., & De Jonge, J. (2001). Maakt arbeid gezond? Op zoek naar de bevlogen werknemer. *De Psycholoog*, *36*, 422-428.
- Schwartz, S., & Bilsky, W. (1990). Towards a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, *58*, 878-891.
- Shoss, M., Witt, L., & Vera, D. (2011). When does adaptive performance lead to higher task performance? *Journal of Organizational Behavior*, *10*, 1-21.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between non-work and work. *Journal of Applied Psychology*, *88*, 518-528.
- Tims, M., & Bakker, A. (2010). Job crafting: Towards a new model of individual job redesign. *Journal of Industrial Psychology*, *36* (2), 1-9.
- Tims, M., Bakker, A., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, *Manuscript submitted for publication*, 173-186.
- van den Heuvel, M., Demerouti, E., & Peeters, M. (2012). Succesvol Job Craften door middel van groepstraining. In J. de Jonge, *Scherp in werk:5 Routes naar optimale inzetbaarheid* (pp. 27-49). NsvP.
- Williams, L., & Anderson, S. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship behaviors. *Journal of Management*, *17*, 601-617.
- Wrzesniewski, A., & Dutton, J. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of management review*, *26* (2), 179-201.

Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2009). Work engagement and financial turnover: A diary study on the role of job and personal resources. *Journal of Organizational and Occupational Psychology*, 82, 183-200.

List of figures

Figure 0-1 The research model of the current study, including significance levels.	VI
Figure 2-1 The map displays three locations of Elkerliek hospital	3
Figure 2-2 Process at Elkerliek hospital (Elkerliek, 2012)	4
Figure 3-1 Research model of this study	7
Figure 3-2 Job Demands-Resources model of Bakker and Demerouti (2007)	11
Figure 5-1 Change over time in increasing job resources.....	30
Figure 5-2 Change over time in decreasing job demands.....	31
Figure 5-3 Change over time in work engagement.....	32
Figure 5-4 Change over time in disengagement	33
Figure 5-5 Change over time in positive mood	34
Figure 5-6 Change over time in adaptive performance	36
Figure 5-7 Change over time in task performance.....	37
Figure 6-1 Research model of the current study, including significant results	42
Figure Appendix I 0-1 Slides job crafting training	70

List of tables

Table 0-1 Examples increase job resources and decrease job demands	VI
Table 2-1 Measurement density and delirium per department	5
Table 4-1 Overview study design	22
Table 4-2 Content of the training.....	23
Table 4-3 Examples increase job resources	23
Table 4-4 Examples decrease hindering job demands.....	24
Table 5-1 Mean and standard deviation (SD) of the study variables (N=58)	27
Table 5-2 Correlations among the study variables at the two measurement occasions.....	28
Table 5-3 Box's test of equality of covariance matrices.....	29
Table 5-4 Output repeated measures GLM for job crafting variables.....	29
Table 5-5 Output repeated measures GLM for outcome variables	31
Table 5-6 Output blocked regression job crafting measures for outcome variables	35
Table 5-7 Output repeated measures GLM for performance	36
Table 5-8 Measurement density of intervention group.....	38
Table 5-9 Output blocked regression job crafting measures for performance	38
Table 5-10 Output blocked regression work engagement for performance.....	39

Appendix I Presentation of the job crafting training

**Bevlogenheidsinterventie
'Job crafting'**

Gerelateerd aan het VMS veiligheidsprogramma
'Kwetsbare ouderen'

70+



Jeanine van Mersbergen
jvanmersbergen@elkerliek.nl
j.v.mersbergen@student.tue.nl

TU/e Technische Universiteit
Eindhoven
University of Technology
Where innovation starts

elkerliek
ZIEKENHUIS

Agenda

- Opzet
- Job crafting
- Ervaringsverhalen
- Oefening
- Persoonlijk crafting plan
- Vragen / reacties



Kort rondje

- Je naam en je functie.
- Van welke afdeling kom je?
- Wat zijn je ideeën bij het woord 'job crafting'?

Waarom deze pilot?

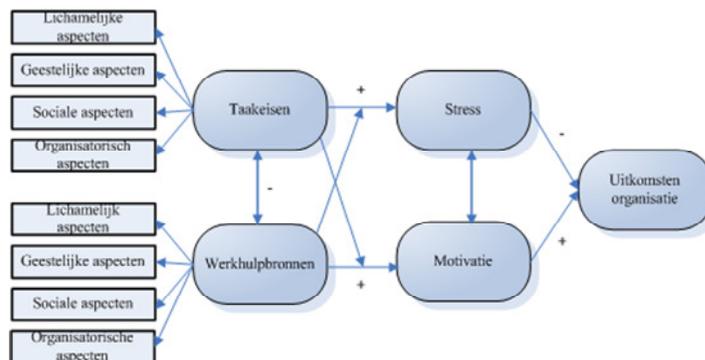
- Het identificeren van factoren die *bevlogenheid* onder verpleegkundigen stimuleert, zodat hun *prestatie* geoptimaliseerd kan worden en zij zich beter kunnen *aanpassen* aan een nieuwe situatie in het ziekenhuis.
- **Bevlogenheid:** “een positieve toestand van opperste voldoening die wordt gekenmerkt door vitaliteit, toewijding en absorptie.”

(Schaufeli & Bakker; 2003, 2004, 2010)

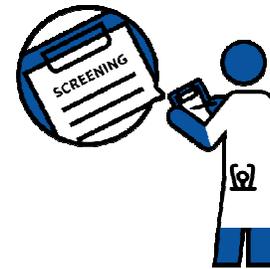
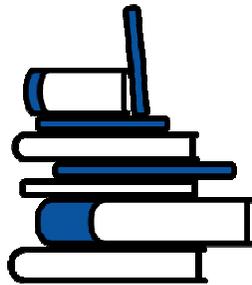
Opzet

- Meting 1 (mei)
- Training + aansluitend 3 weken opdrachten (mei)
- Meting 2 (juni)

Het job demands-resources model



Maar... wat kun je zelf doen om bevlogen te worden of te blijven...?



Wat is job crafting?

- De aanpassingen die werknemers zelf maken aan hun werk.. (werkomstandigheden, taken en/of relaties)...met als doel hun werkbeleving positief te beïnvloeden

(Wrzesniewski & Dutton, 2001)

- (Werk)hulpbronnen vergroten
- Taakeisen verhogen of uitdagingen zoeken
- Taakeisen verlagen

Ervaringsverhalen VMS

- **Invullen kwaliteitskaart**
 - Ik moet al zoveel lijsten invullen dus heb geen tijd.
 - Ik heb geen voordeel aan invullen kwaliteitskaart.
 - Ik heb geen zin in invullen kwaliteitskaart.
- **Invullen DOS score**
 - Ik heb geen voordeel aan invullen DOS score.
 - Ik weet niet of ik het op de juiste manier invul.
- **Uitvoeren preventieve handelingen**
 - Ik weet niet welke preventieve handelingen ik moet doen.
 - Ik heb geen tijd voor preventieve handelingen.

Wat zijn andere ervaringsverhalen met het VMS?

Best practice verhalen

- **Het delen van, samenwerken aan, communiceren over en leren van elkaars praktijkervaringen met als gevolg het verkrijgen van optimale prestaties en hoogwaardige patiëntenzorg via:**
 - **Positieve interactie met collega's**
 - **Sociale steun/ team work**
 - **Bewustzijn**
 - **Gemeenschappelijk doel nastreven**
 - **Job crafting**

Oefening

- Werk in duo's
- Denk na over je eigen verhaal van een “best practice” situatie. (5-10 mins)
- Deel je verhaal kort met je partner (10 min)
- Beantwoord de vragen
 - Wat heeft dit verhaal je geleerd?
 - Hoe kan je de leerpunten toepassen op het dagelijks werk?
- Bereid je voor om de belangrijkste leerpunten met de grote groep te delen.

Algemene voorbeelden job crafting

<i>Werkhulpbronnen vergroten</i>	<i>Taakeisen verlagen</i>	<i>Taakeisen verhogen</i>
<ul style="list-style-type: none"> - Feedback zoeken - Steun zoeken - Participatie; OR - Leermogelijkheden zoeken - Aankleding werkplek 'complimenten map' - Investeren in relaties 	<ul style="list-style-type: none"> - Taken versimpelen, verlichten - Efficiënter werken/plannen - Perfectionisme loslaten - Nee zeggen - Heldere afspraken maken - Rustige ruimte zoeken 	<ul style="list-style-type: none"> - Talenten en interesses inzetten; Sport Talenkennis Creativiteit Coachen Strategisch denken

Terugkoppeling

- Wat heeft dit verhaal je geleerd?
- Hoe kun je deze leerpunten toepassen op je dagelijks werk?

Voorwaarden 'job crafting'

- Crafting doe je zelf, op eigen initiatief.
- Zorg dat er geen negatief effect is op anderen of op je eigen productiviteit.
- Taakinhoud veranderen? Overleg met je leidinggevende.
- Geen taken afstoten.
- De 'puzzel' wordt niet groter of kleiner, maar beter passend.

Persoonlijk Crafting Plan: Doelen stellen

- SMART – welke resultaten wanneer?:
- Specifiek, wat ga je precies doen? Waar? Wanneer?
- Meetbaar, hoe kan je achteraf nagaan in hoeverre je je doel bereikt hebt?
- Afgesproken – sta je zelf achter het doel? Wil en kan je er echt voor gaan? Zo niet, pas het doel aan zodat je er wel voor wil gaan.
- Realistisch – haalbaar gegeven de tijd?
- Tijdsgebonden - bepaal de tijd waarbinnen het doel bereikt moet zijn

SMART?

"Aanstaande woensdag zal ik om 12.30 10 minuten vrij maken om met mijn collega Piet te praten over wat hij mij goed ziet doen of wat beter kan bij de kwaliteitskaart van patient X"

Job crafting doelen opstellen

- Week 1: Hulpbronnen verhogen
- Week 2: Hulpbronnen verhogen
- Week 3: Taakeisen verlagen

- Stel nu per week je SMART, motiverende crafting doelen op.
- Zorg dat het doel haalbaar is.

Tot slot..

- Iedere week op maandag:
 - Opstellen SMART doel
- Iedere week op vrijdag:
 - Kort vragenlijstje
- Gedurende week:
 - Het doel nastreven

In juni zal meting 2 plaatsvinden.

Vragen / reacties?

Bedankt en succes!



elkerliek 
ZIEKENHUIS

TU/e Technische Universiteit
Eindhoven
University of Technology

20-8-2012 PAGE 18

Figure Appendix I 0-1 Slides job crafting training

Bevlogenheids Interventie

Persoonlijk actie plan

‘Sleutelen aan je werk’

2012

Technische Universiteit Eindhoven
Capaciteitsgroep Human Performance Management

Bevlogenheid Onderzoek: Elkerliek ziekenhuis

Iedereen heeft een rol in het vormgeven van de werkomgeving. Het delen en bediscussiëren van je persoonlijke ervaringen met betrekking tot de werkzaamheden in het ziekenhuis met andere verpleegkundigen kan positieve gevolgen hebben voor de bevlogenheid in het werk, de kwaliteit van de besluitvorming en de (medische) prestatie. Het is aan jou om de baan te creëren die je wenst en nodig hebt om optimaal te kunnen functioneren. Als je nu even tijd neemt om hierin te investeren, kan dit je in de toekomst helpen doordat je bevlogenheid in het werk en je prestatie positief beïnvloed worden. Het actief werken hieraan wordt job crafting genoemd, oftewel ‘sleutelen aan je werk’.

Tijdens de bijeenkomst maken we kennis met drie aspecten van sleutelen aan je werk, namelijk het verhogen van werkhulpbronnen, het verlagen van taakeisen en het verhogen van taakeisen. In de volgende tabel worden voorbeelden genoemd bij de drie typen ‘sleutelen aan je werk’.

Algemene voorbeelden sleutelen aan je werk		
<i>Werkhulpbronnen vergroten</i>	<i>Taakeisen verlagen</i>	<i>Taakeisen verhogen</i>
<ul style="list-style-type: none"> - Feedback zoeken - Steun zoeken - Participatie; OR - Leermogelijkheden zoeken - Aankleding werkplek ‘complimenten map’ - Investeren in relaties 	<ul style="list-style-type: none"> - Taken versimpelen, verlichten - Efficiënter werken/plannen - Perfectionisme loslaten - Nee zeggen - Heldere afspraken maken - Rustige ruimte zoeken 	<ul style="list-style-type: none"> - Talenten en interesses inzetten; Sport Talenkennis Creativiteit Coachen Strategisch denken

Na deze bijeenkomst zal drie weken lang een doel gesteld worden die betrekking heeft op één van de aspecten van sleutelen aan je werk gericht op het veiligheidsprogramma ‘kwetsbare ouderen’. In week 1 en week 2 ligt de focus op het verhogen van werkhulpbronnen. In week 3 zal de focus liggen op het verlagen van de taakeisen. Aan het begin van iedere week zul je het doel formuleren en noteren, en op het eind van iedere week zal een korte vragenlijst worden ingevuld over het behalen van het doel en de emoties die je erbij voelde. Deze opdrachten zijn op een chronologisch wijze in dit boekje verwerkt. De planning voor van dit alles ziet er op de volgende manier uit:

Planning			
<i>April</i>	<i>Mei</i>	<i>Mei-Juni</i>	<i>Juni</i>
Vragenlijst	Training+ 3x opdracht	Vragenlijst	Reflectiebijeenkomst (optioneel)

Ik wil u vragen dit boekje goed te bewaren en volledig in te vullen. Aan het einde van de opdrachten kunt u het boekje inleveren in het postvak bij uw afdelingsmanager of op de teampost.

Hieronder staan een aantal voorbeelden van ‘sleutelen aan je werk’ in de praktijk:

1. Verhogen werkhulpbronnen

- *Efficiëntie van communicatie/samenwerking.* Praten over het werk in dagelijks teamoverleg (patiëntupdates, bevordert team samenwerking en -kwaliteit).
- *Sociale steun van collega's.* Zoek eens een andere collega op die je kan helpen wanneer je een idee of vraag heeft, of behoefte heeft om met iemand anders te praten.
- *Stimuleer opbouwende feedback.* Vraag aan je afdelingsmanager om een cultuur te creëren die het geven van en het vragen om constructieve feedback stimuleert (creëer een veilige omgeving die mensen aanmoedigt om feedback op een positieve manier te geven en ontvangen; dit draagt stapsgewijs bij aan de vorming van een positieve cultuur).
- *Stimuleer persoonlijke ontwikkeling.* Dit helpt je meer bewust te zijn van jezelf en is een investering in jezelf, helpt je om een gezondere en betere verpleegkundige te worden die de kwaliteit van de zorg verbetert, ondersteuning geeft bij problemen en advies geeft.

2. Verlagen taakeisen

- *Werk management.* Wanneer er geen digitaal systeem gebruikt kan worden, gebruik dan bijvoorbeeld papieren dossiers met een tab waarop de namen van de patiënten staan en leg die zodanig neer dat de alle namen zichtbaar zijn.
- *Tijd/werk-management.* Accepteer geen nieuwe taken buiten je verplichte taakeisen als je weet dat je achterloopt of dat je werkdruk te hoog is; ken je grenzen.
- *Tijd management.* Werk de status / registratie tijdens of direct na het verzorgen bij. (voorkom achterstallig werk).

3. Verhogen taakeisen

- *Vrijwilligerswerk.* Voor een commissie (draagt bij aan de intrinsieke motivatie omdat je jezelf en jouw diensten aan anderen kunt aanbieden, wat je een positief gevoel van eigenwaarde geeft).
- *Communicatie over emotionele/ernstige kwesties.* Bij het geven van ernstige en emotionele informatie aan patiënten en families helpt het om tijd te nemen om proactief naar hen te luisteren, duidelijk uit te leggen en oprecht met hen te spreken en ze te behandelen als mensen. Geef hen de kans om bij te dragen aan de besluitvorming en vraag naar religieuze voorkeuren.
- *Blijf op de hoogte van huidig, recent onderzoek.* Verminder je zorgen/angsten dat je fouten maakt door op de hoogte te blijven van huidig werkwijzen en best practices, lees verstrekte informatie (Je bent, bijvoorbeeld, bang dat je zal vastroesten naarmate je ouder wordt).

Oefenopdracht – Je eigen verhaal bedenken

Neem 10 minuten om je verhaal te construeren. Hoe kies je een situatie? Denk aan...

- Een situatie die eruit springt als de essentie van goede verpleegkundige handelingen.
- Een situatie waarin je iets nieuws geleerd hebt, die nieuwe manieren van werken /helpen /onderzoeken met zich meebracht, of waardoor je iets nieuws ontdekte.
- Een memorabele uitwisseling of ontmoeting waardoor je iets nieuws leerde.
- Een situatie waarin je duidelijk het verschil maakte.
- Een situatie van een *breakdown, fout, of moreel dilemma*, die memorabel is door de issues die het voor jou als verpleegkundige met zich meebracht.

Je eigen verhaal:

Voorbeeld verhalen

1. Verhogen werkhulpbronnen

Communicatie/ Steun zoeken

Voor mij geldt, dat als ik niet weet op welke manier ik het beste kan handelen tijdens onverwachte wendingen gedurende het werk, dat ik steun zoek bij een collega. Hierdoor verbeter ik mijn prestaties tijdens mijn werkzaamheden. Een van de belangrijkste dingen voor mij is om een les uit de steun te trekken. Dit heeft positieve effecten op de patiëntenzorg en maakt mijn werk leuker en aangenamer. Hoe beter ik weet hoe te handelen, des te gemakkelijker mijn werk. Een voorbeeld hiervan is dat ik onlangs een plotseling onrustige patiënt op de afdeling had. Ik wist niet op welke manier ik hiermee het beste om kon gaan, dus ik ging informeren bij een collega. Deze wist de juiste protocollen waardoor de behandeling aangepast werd en de situatie oploste. Dankzij de steun van mijn collega is de situatie op een goede manier opgelost. Ik heb hier een les uit getrokken en weet de volgende keer beter hoe ik moet handelen.

2. Verlagen taakeisen

Efficiënt/ Dossier

Op onze afdeling is het veiligheidsprogramma 'Kwetsbare ouderen' ingevoerd dat goed is onderzocht. Hiervoor moet ik bij patiënten ouder dan 70 jaar een kwaliteitskaart invullen door middel van vinkjes om het risico op een delier in te schatten. Voorheen moest ik alle observaties uitwerken in het verpleegkundig dossier. Het veiligheidsprogramma helpt mij om het risico beter in kaart te brengen en sneller uit te werken dankzij de aspecten die onderdeel zijn van de kwaliteitskaart. Ik hoef alle observaties niet meer te noteren in het verpleegkundig dossier. Daarnaast is het duidelijker aan de hand van welke aspecten iemand een risico heeft op delier en staan er geen overbodige observaties genoteerd in het verpleegkundig dossier. Dit maakt het zorgproces efficiënt.

3. Verhogen taakeisen

Kwaliteit van patiëntenzorg

Op onze afdeling is een onrustige patiënt opgenomen, wat een complexere situatie met zich mee brengt. Voor deze patiënt is de kwaliteitskaart en DOS score ingevoerd. Ik was in staat om aan de hand van de bijgehouden DOS score het verloop van de ziekte van de patiënt te ontdekken, zodat tijdig de behandeling van de patiënt aangepast kan worden. Als gevolg van het lezen van de DOS score en oplettendheid, is de patiënt op een betere manier behandeld en heb ik een positieve invloed gehad op de gezondheid van de patiënt. Door het gebruiken van de DOS score gaat het nu stukken beter met de patiënt en is de situatie minder complex geworden.

Persoonlijk Crafting Doel opstellen

1. Denk aan de verhalen uit de vorige oefening. Welk aspect uit de verhalen wil je meer inbouwen in je werk? Op wat voor manier zal dit bijdragen aan jouw werkplezier / motivatie?
2. Kies een werksituatie/moment waarin je dit aspect kan toepassen.
3. Het kan zijn dat je een hulpbron gaat verhogen (bijv. steun /feedback vragen), een taakeis gaat verlagen (bijv. perfectionisme, nee zeggen) of een uitdaging gaat zoeken (bijv. mentoring /coaching collega, onderzoek doen)
4. Stel aan de hand van de SMART richtlijnen een voor jou motiverend crafting doel op; maak het concreet. Wat ga je wanneer, hoe en met wie doen / bespreken?
5. Denk na over wat je de komende 3 weken, iedere week kan doen om dit te realiseren.
6. Waarom is het doel belangrijk voor je? Wat zou het je opleveren?

SMART Doelen stellen

Welke resultaten wil ik wanneer bereiken? Zorg ervoor dat de gestelde doelen aan de volgende aspecten voldoen.

1. **Specifiek**, wat ga je precies doen? Waar? Wanneer?
2. **Meetbaar**, hoe kan je achteraf nagaan in hoeverre je het doel bereikt hebt?
3. **Afgesproken**, sta je zelf achter het doel? Wil en kan je er echt voor gaan? Zo niet, pas het doel aan zodat je er wel voor wil gaan.
4. **Realistisch**, haalbaar gegeven de tijd?
5. **Tijdsgebonden**, bepaal de tijd waarbinnen het doel bereikt moet zijn.

Graag in onderstaande tabel een SMART doel opstellen voor week 1.

Week 1	Persoonlijk Crafting Plan
Doel: Hulpbron verhogen	
Acties om doel te realiseren:	
Opmerkingen:	

Graag aan het einde van week 1 de vragen invullen op de volgende pagina.

Deze vragen invullen aan het einde van week 1.

Beoordeling behalen doel week 1

Kies bij elke vraag het best passende antwoord (op een schaal van 1 (geheel oneens) tot en met 5 (geheel eens)).

		Geheel oneens	Oneens	Neutraal	Eens	Geheel eens
1.	Ik heb aanzienlijke vooruitgang geboekt in het bereiken van mijn doel.	1	2	3	4	5
2.	Ik heb bereikt wat ik wilde bereiken in dit doel.	1	2	3	4	5

Gemoedstoestand week 1

Tijdens mijn werk voelde ik mij de **afgelopen week...** (Omcirkel het antwoord dat het beste bij u past)

Deze week voelde ik mij...		Helemaal niet						in zeer sterke mate
1.	...op mijn gemak.	1	2	3	4	5	6	7
2.	...kwaad.	1	2	3	4	5	6	7
3.	...ongerust	1	2	3	4	5	6	7
4.	...woedend.	1	2	3	4	5	6	7
5.	...energiek.	1	2	3	4	5	6	7
6.	...ontmoedigd.	1	2	3	4	5	6	7
7.	...gelukkig.	1	2	3	4	5	6	7
8.	...beschaamd.	1	2	3	4	5	6	7
9.	...somber.	1	2	3	4	5	6	7
10.	...enthousiast.	1	2	3	4	5	6	7
11.	...vermoeid.	1	2	3	4	5	6	7
12.	...geïnspireerd.	1	2	3	4	5	6	7
13.	...voldaan.	1	2	3	4	5	6	7
14.	...onstpannen.	1	2	3	4	5	6	7
15.	...gefrustreerd.	1	2	3	4	5	6	7
16.	...schuldig.	1	2	3	4	5	6	7

Bedankt! Graag aan het begin van week 2 een SMART doel voor week 2 opstellen.

Graag in onderstaande tabel een SMART doel opstellen voor week 2.

Week 2	Persoonlijk Crafting Plan
Doel: Hulpbron verhogen	
Acties om doel te realiseren:	
Opmerkingen:	

Graag aan het einde van week 2 de vragen invullen op de volgende pagina.

Deze vragen invullen aan het einde van week 2.

Beoordeling behalen doel week 2

Kies bij elke vraag het best passende antwoord (op een schaal van 1 (geheel oneens) tot en met 5 (geheel eens)).

		Geheel oneens	Oneens	Neutraal	Eens	Geheel eens
1.	Ik heb aanzienlijke vooruitgang geboekt in het bereiken van mijn doel.	1	2	3	4	5
2.	Ik heb bereikt wat ik wilde bereiken in dit doel.	1	2	3	4	5

Gemoedstoestand week 2

Tijdens mijn werk voelde ik mij de **afgelopen week...** (Omcirkel het antwoord dat het beste bij u past)

Deze week voelde ik mij...		Helemaal niet						in zeer sterke mate
1.	...op mijn gemak.	1	2	3	4	5	6	7
2.	...kwaad.	1	2	3	4	5	6	7
3.	...ongerust	1	2	3	4	5	6	7
4.	...woedend.	1	2	3	4	5	6	7
5.	...energiek.	1	2	3	4	5	6	7
6.	...ontmoedigd.	1	2	3	4	5	6	7
7.	...gelukkig.	1	2	3	4	5	6	7
8.	...beschaamd.	1	2	3	4	5	6	7
9.	...somber.	1	2	3	4	5	6	7
10.	...enthousiast.	1	2	3	4	5	6	7
11.	...vermoeid.	1	2	3	4	5	6	7
12.	...geïnspireerd.	1	2	3	4	5	6	7
13.	...voldaan.	1	2	3	4	5	6	7
14.	...onstpannen.	1	2	3	4	5	6	7
15.	...gefrustreerd.	1	2	3	4	5	6	7
16.	...schuldig.	1	2	3	4	5	6	7

Bedankt! Graag aan het begin van week 3 een SMART doel voor week 3 opstellen.

Graag in onderstaande tabel een SMART doel opstellen voor week 3.

Week 3	Persoonlijk Crafting Plan
Doel: Taakeisen verlagen	
Acties om doel te realiseren:	
Opmerkingen:	

Graag aan het einde van week 3 de vragen invullen op de volgende pagina.

Deze vragen invullen aan het einde van week 3.

Beoordeling behalen doel week 3

Kies bij elke vraag het best passende antwoord (op een schaal van 1 (geheel oneens) tot en met 5 (geheel eens)).

		Geheel oneens	Oneens	Neutraal	Eens	Geheel eens
1.	Ik heb aanzienlijke vooruitgang geboekt in het bereiken van mijn doel.	1	2	3	4	5
2.	Ik heb bereikt wat ik wilde bereiken in dit doel.	1	2	3	4	5

Gemoedstoestand week 3

Tijdens mijn werk voelde ik mij de **afgelopen week...** (Omcirkel het antwoord dat het beste bij u past)

Deze week voelde ik mij...		Helemaal niet						in zeer sterke mate
1.	...op mijn gemak.	1	2	3	4	5	6	7
2.	...kwaad.	1	2	3	4	5	6	7
3.	...ongerust	1	2	3	4	5	6	7
4.	...woedend.	1	2	3	4	5	6	7
5.	...energiek.	1	2	3	4	5	6	7
6.	...ontmoedigd.	1	2	3	4	5	6	7
7.	...gelukkig.	1	2	3	4	5	6	7
8.	...beschaamd.	1	2	3	4	5	6	7
9.	...somber.	1	2	3	4	5	6	7
10.	...enthousiast.	1	2	3	4	5	6	7
11.	...vermoeid.	1	2	3	4	5	6	7
12.	...geïnspireerd.	1	2	3	4	5	6	7
13.	...voldaan.	1	2	3	4	5	6	7
14.	...onstpannen.	1	2	3	4	5	6	7
15.	...gefrustreerd.	1	2	3	4	5	6	7
16.	...schuldig.	1	2	3	4	5	6	7

Bedankt! Graag op de volgende pagina een anonieme code aanmaken en dit boekje inleveren bij uw afdelingsmanager.

Anonieme code

Vul de volgende gegevens in om ons te helpen deze interventie te koppelen aan enquêtes . Om de vertrouwelijkheid te waarborgen zal deze informatie na afronding van het onderzoek worden vernietigd.

1	2	3	4	5

1. De tweede letter van de voornaam van uw moeder.
2. De tweede letter van de voornaam van uw vader.
3. De laatste letter van de meisjesnaam van uw moeder.
4. De tweede letter van de voornaam van uw grootmoeder (moeder van uw moeder).
5. De tweede letter van de voornaam van uw grootmoeder (moeder van uw vader).

In juni zal de tweede vragenlijst uitgedeeld worden om uw ervaringen te meten.



Bedankt! *Voor het deelnemen aan deze bijeenkomst, het invullen van de vragenlijsten en het retourneren van de resultaten.*