

# The facilitators and barriers of job crafting among nurses on the individual-, team- and job-level

Master thesis

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# 1. Introduction

## 1.1 Research context

Nurses actively manage and change the boundaries of their tasks and expand their relationships with patients and colleagues, according to Wrzesniewski and Dutton (2001). These employee-initiated actions, which shape the task and relational boundaries of jobs, are referred to as job crafting (Wrzesniewski & Dutton, 2001). Job designs with a high degree of autonomy provide a greater opportunity to craft the job. However, even with rigid job designs it is possible to engage in job crafting (Berg et al., 2008).

The research of Rudolph et al. (2017) shows that job crafting is positively related to job satisfaction and contextual performance. According to Yepes-Baldó et al. (2018) job crafting also leads to a higher well-being of employees. Nowadays, nurses experience a lot of stress, anxiety and high workload due to high patient volumes and a global shortage of nurses (Hall, 2020). Therefore, exploring the facilitators of job crafting is of importance for nurses themselves.

Besides, Yepes-Baldó et al. (2018) found that higher levels of job crafting activities among nurses were associated with higher quality of care. As a result, nurses who engage in job crafting enhance the quality of health care, which is of interests of healthcare organizations. For that reason, it is of importance for healthcare organizations to understand how they can stimulate job crafting behavior, in order to ensure the quality of care. Nurses who engage in job crafting are able to increase their job satisfaction, well-being, contextual performance and provide a higher quality of care (Rudolph et al., 2017; Yepes-Baldó et al., 2018). A multilevel perspective which identifies facilitators and barriers may help nurses and healthcare organizations to identify facilitators and barriers they can influence in order to achieve positive outcomes.

Job crafting is framed by the Job-demands Resources (JD-R) model (Bakker & Demerouti, 2007). According to this model, job crafting is fostered by (1) increasing job resources, (2) increasing challenging job demands and (3) decreasing hindering job demands (Tims et al., 2012). Job resources refer to aspects of the job that are functional in achieving work goals, reduce job demands or stimulate personal growth, learning and development (Bakker & Demerouti, 2007). Job demands are the aspects of the job that require sustained physical and/or psychological effort or skills and are therefore associated with certain costs at physical or cognitive level (Bakker & Demerouti, 2007). According to Tims and Bakker

(2012), employees craft their jobs by increasing job resources, increasing challenging job demands and decreasing hindering job demands.

## 1.2 Aim and research question

There is a growing interest in the health care profession to proactively craft the job design in order to improve healthcare systems (Gordon et al., 2018). To obtain and maintain high quality healthcare, healthcare organizations should provide resources to encourage nurses to craft their jobs. To understand which aspects drive job crafting among nurses, the facilitators and barriers of job crafting needs to be identified. A multilevel perspective on the barriers and facilitators gives insight in the personal and contextual factors that influence job crafting behavior (Tims et al., 2021). Since there is no multilevel model yet that defines the individual-, team-, and job-level of job crafting, a model is developed to define and understand these three levels.

Identifying facilitators and barriers according to the developed model gives insight in the role of organizations to stimulate job crafting among nurses, but also what the individual do to enhance job crafting behavior. Facilitators and barriers on the job-level provide insights in how organizations can stimulate job crafting among nurses. Furthermore, organizations make increasingly use of work teams in which employees perform many of their tasks in team settings (Colquitt et al., 2002). Thus, insights into the facilitators and barriers on team-level become more interesting for healthcare organizations. The individual-level of job crafting focuses on the characteristics of the person. Since job crafting leads to higher well-being (Yepes-Baldó et al., 2018), the facilitators of job-crafting are relevant for the nurses themselves.

Insights into the facilitators and barriers on the individual-, team- and job-level are interesting for both, healthcare organizations and nurses. Therefore, the following research question will be answered: *What are the facilitators and barriers of job crafting that nurses perceive at the individual-, team-, and job-level?*

The aim of this research is to contribute to the literature about job crafting among nurses by identifying the barriers and facilitators of job crafting on the individual-, team- and job-level.

## 1.3 Relevance

This research is of theoretical relevance for the job crafting literature. Bakker (2017) states that there is no clear insight into the barriers and facilitators of job crafting for various groups

of healthcare professionals. Also, Tims et al. (2021) state that further research of job crafting on the individual-, team- and job-level contributes to the job crafting literature, because the multilevel perspective can be helpful to understand personal and contextual influences which co-determine job crafting. There is not a lot of research which focuses on these different levels, especially not on the job-level of job crafting (Tims et al., 2021). By filling in these knowledge gaps, this research contributes to the literature of job crafting among nurses.

This research is also of practical relevance for healthcare organizations and nurses, because it is difficult for organizations to create job designs that are optimal for every single employee (Berg et al., 2008). When nurses are proactive and have the opportunity to craft their jobs, the job designs can be adapted and developed over time to accommodate the nurses' individual preferences. Insights in the facilitators and barriers of job crafting on the individual-, team- and job-level help healthcare organizations to provide these facilitators to such an extent that nurses have the opportunity to craft their job in order to improve healthcare. In the end, job crafting also benefits patients with a higher quality of healthcare (Wrzeniewski & Dutton, 2001).

#### 1.4 Outline

The next chapter will provide the theoretical framework in which the literature of facilitators and barriers of job crafting on the individual-, team- and job-level is discussed. Chapter 3 elaborates on the methodology and gives insights in how the research is conducted. In chapter 4 the findings of this research are presented. From these findings, conclusions are drawn in chapter 5. Finally, the discussion with the implications, limitations and suggestions for further research are discussed in chapter 6.

## 2. Theoretical Framework

This chapter provides an overview of the existing literature about job crafting and the potential facilitators and barriers of job crafting. The theoretical framework elaborates on the main concepts of job crafting and the facilitators and barriers of job crafting. First, the literature about the concept of job crafting will be discussed, followed by the Job Demands-Resources model. In section 2.3, the three levels of job crafting will be defined. Section 2.4 focuses on the potential facilitators of job crafting. The potential barriers of job crafting will be discussed in section 2.5. Finally, the conclusion of the theoretical framework will be given.

### 2.1 Job crafting

Employees who craft their jobs adjust and redesign proactively their job design to make it more meaningful (Tims & Bakker, 2010). The job of an employee exists of multiple job components. These job components can be referred to as tasks. A job is defined as a set of tasks grouped together under one job title and designed to be performed by a single individual (Ilgen & Hollenbeck, 1992). Job crafting involves actions employees take to shape the task boundaries or the relational boundaries of the job, or both (Wrzesniewski & Dutton, 2001). The actions that employees take to craft their job are not specific arrangements that are negotiated with the supervisor, but initiated by the employee themselves (Tims & Bakker, 2010). Thereby, job crafting has an bottom-up approach, which means that the initiative of job crafting is initiated by the employee instead of the organization (Wrzesniewski & Dutton, 2001; Rudolph et al., 2017).

Wrzesniewski and Dutton (2001) distinguished three types of job crafting, which are task crafting, cognitive crafting and relational crafting. Task crafting involves activities to change the number and type of activities or tasks. Cognitive crafting focuses on the way the employee thinks about the job. Relational crafting is defined as the discretion about choosing with whom to work (Harbridge et al., 2022; Wrzesniewski & Dutton, 2001).

Employees have different motivations to engage in job crafting. According to Wrzesniewski and Dutton (2001), the motivation for employees to craft their jobs arises from three individual needs. The first motivation is to assert a certain amount of control over their jobs in order to avoid alienation from their work. Second, creating a positive self-image in their work also motivates employees to engage in job crafting. A third motivation is to fulfil a basic human need for connection with other human beings (Wrzesniewski & Dutton, 2001).

## 2.2 The Job demands-resources model

A theoretical model which framed the concept of job crafting is the Job Demands-Resources (JD-R) model (Demerouti et al., 2001; Bakker & Demerouti, 2007). The JD-R model assumes that every occupation has unique and specific job characteristics, but can still be captured in one model (Bakker & Demerouti, 2007). This model emphasizes that all job characteristics can be categorized in two broad categories, which are job demands and job resources (Demerouti et al., 2001; Bakker & Demerouti, 2007).

Job demands refer to physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological effort or skills and are therefore associated with certain costs at physical or cognitive level (Bakker & Demerouti, 2007). Job demands can be divided into two categories, which are challenging job demands and hindering job demands. Challenging job demands stimulate employees to develop their knowledge and skills or to attain more demanding goals. Hindering job demands are no longer challenging, but become overwhelming (Tims et al., 2011). Job demands are not necessarily negative. However, when meeting those demands requires high effort of the employee without the possibility to adequately recover, these job demands might turn into job stressors (Meijman & Mulder, 1998; Bakker & Demerouti, 2007).

In order to reduce job demands and the physical or psychological costs, job resources are necessary (Bakker & Demerouti, 2007). Employees with high levels of job resources are more capable of dealing with job demands (Bakker et al., 2005; Xanthopoulou et al., 2007). Job resources refer to physical, psychological, social or organizational aspects of the job that are functional in achieving work goals, reduce job demands and its costs or stimulate personal growth, learning and development (Bakker & Demerouti, 2007). Job resources can be divided into two categories as well, which are social job resources and structural job resources. Social job resources refer to the aspects of the job such as conflict management, emotional and instrumental support from supervisors and colleagues (Demerouti et al., 2000; Blanco-Donoso et al., 2017). Structural job resources refer to the resources variety, opportunity for development and autonomy which enhances one's influence in the decision making processes (Van Wingerden & Poell, 2017).

Interaction takes place between job demands and job resources, which makes job crafting possible (Bakker & Demerouti, 2007). Based on the JD-R model, job crafting consists of three conceptually different dimensions. The dimensions of (1) increasing job resources, (2) increasing challenging job demands and (3) decreasing hindering job demands foster job crafting (Tims et al., 2012).

### 2.3 Multilevel perspective on job crafting

Characteristics of the individual or the work situation may facilitate job crafting behavior of employees (Tims & Bakker, 2010). The bottom-up approach of job crafting does not replace a top-down approach, in which management implement decisions, but complements existing top-down approaches (Harbridge et al., 2022; Bakker & Demerouti, 2018). According to Bakker and Demerouti (2018), it is therefore essential to distinguish various levels of job crafting. In their research, they distinguish three levels of job crafting, which are the individual level, team level and organizational level. The organizational level is replaced by the job level in this research, since the research is done over multiple organizations. The definition of these levels will be briefly discussed in this paragraph.

First, the individual-level of job crafting will be defined. The antecedents of job crafting on the individual-level are considered to lie in the characteristics of the individual or in the experience of the individual within the organization (Tims & Bakker, 2010; Daouk-Öyry et al., 2014). Based on the research of Daouk-Oyry et al. (2014), these antecedents include demographics, personal characteristics, job attitudes and health and well-being.

The team-level of job crafting is defined by Tims et al. (2013) as “the extent to which team members combine efforts to increase structural and social job resources as well as challenging job demands, and to decrease their hindering job demands” (p. 432). The team-level consists of shared team properties and configural team properties. Shared team properties are factors that are held in common by team members, for example team cohesion, team norms, team climate and mental models (Klein & Kozlowski, 2000). Configural team properties capture the variability of individual characteristics within a team by the array or configuration of individual characteristics, according to Klein and Kozlowski (2000). The shared team properties as well as the configural team properties of the team-level focuses on the perceptions of team members. Therefore, leadership perceptions shared among members of a team are also part of the team-level (Klein & Kozlowski, 2000).

Facilitators and barriers of job crafting on the job-level are characteristics which lay in the job that employees hold (Wheeler et al., 2012). Daouk-Oyry et al. (2014) suggests that this level consists of two aspects, which are job demand and job control. Thereby, it corresponds with the two aspects of the job demand-control model of Karasek (1979). The first aspect, job demand, refers to psychological stressors which are involved in the fulfillment of a particular job (Karasek, 1979; Daouk-Oyry et al., 2014). Factors such as high workload, work/family conflict and a demanding nature of the job are examples of job-level characteristics (Daouk-

Oyry et al., 2014). Job control relates to the amount of control that individual employees have over their tasks, conduct and work situation and the extent to which the characteristics of the job provide an opportunity for employees to use their skills and capabilities (Karasek, 1979; Daouk-Oyry et al., 2014).

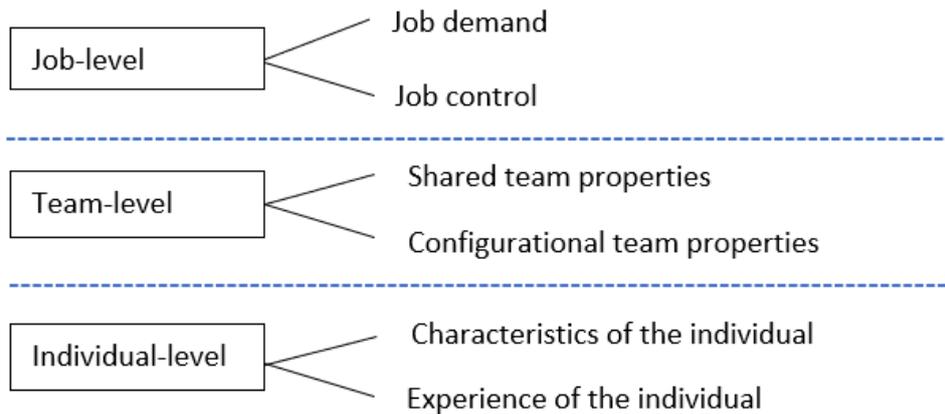


Figure 1. Individual-, team- and job-level of job crafting

## 2.4 Potential facilitators of job crafting

This section describes the potential facilitators of job crafting which are mentioned in the literature. These facilitators are divided into the individual-, team- and job-level. However, not all the existing literature makes this clear distinction. The potential facilitators are based on the recent research of Harbridge et al. (2022) and the research of Tims and Bakker (2010). The research of Harbridge et al. (2022) extensively identifies themes which may facilitate job crafting among nurses. The identified facilitators will be substantiated by existing literature of the facilitators. Only facilitators which can be detected by qualitative research are mentioned.

### 2.4.1 Individual-level

A potential facilitator of job crafting behavior on the individual level are **personality traits** of employees, such as a proactive personality (Tims & Bakker, 2010). People with a **proactive personality** actively seek information and opportunities in order to influence their environment and bring change (Tims & Bakker, 2010; Crant, 2000; Bateman & Crant, 1993). For this reason, people with a proactive personality are more likely to engage in job crafting, because they take initiative to change their environment (Tims & Bakker, 2010).

Secondly, **self-efficacy** can facilitate job crafting behavior (Tims & Bakker, 2010). Self-efficacy is defined as the beliefs that people have in their abilities and capabilities to

execute desired behaviors and to impact their environment successfully (Bandura, 1997). These beliefs develop through past experiences, verbal persuasion from others and physiological or psychological states which reduce stress and negative emotions (Bandura, 1997). People avoid tasks which are beyond their capacities and perform tasks that they believe they have the abilities and skills for to execute them successfully (Ventura et al., 2014).

#### 2.4.2 Team-level

A facilitator of job crafting among nurses on the team-level is the support that employees receive from management (Harbridge et al., 2022). This support can be provided by the **leadership style** of the team manager (Wrzesniewski & Dutton, 2001; Esteves & Lopes, 2017). Leadership is defined by Hersey et al. (1979) as the process of influencing the activities of an individual or a group in efforts toward goal accomplishment. A leadership style is the pattern of attitudes and behaviors that leaders exhibit (Anderson & Sun, 2017). According to Esteves and Lopes (2017), empowering leadership has coaching characteristics, which encourages nurses to develop themselves. An empowering leadership style influences psychological empowerment, creativity, autonomy, and intrinsic motivation of the employee (Zhang & Bartol, 2010). When the supervisor of the team has an empowering leadership style, this can provide nurses with a feeling of permission from their supervisor to develop themselves and craft their job. Besides the empowering leadership style, directive leadership also shows a significant effect on job crafting among nurses (Esteves & Lopes, 2017). This relationship between directive leadership and job crafting is explained by seeking for feedback about job performance. Asking for feedback is driven by a goal-setting environment which the directive leader creates (Esteves & Lopes, 2017). The organization has a goal-setting environment when the employees are oriented to performance goals and driven by them (Esteves & Lopes, 2017). On a team level, the leader of the team can facilitate job crafting behavior among nurses according to the leadership style of the team leader.

#### 2.4.3 Job-level

Another facilitator identified by literature is the level of **job autonomy** the employee has (Harbridge et al., 2022; Tims & Bakker, 2010). The level of job autonomy that the organization provides in the job design determines the possibility of job crafting (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). Job autonomy is defined by Hackman and Oldham (1976) as ‘the degree to which the job provides substantial freedom, independence,

and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out' (p. 258). The research of Petrou, et al. (2012) shows that high levels of job autonomy and workload lead to employees seeking more job resources and reduce job demands on a daily basis. This means that employees who perceive a high level of job autonomy tend to enhance the opportunity of job crafting. This relationship between high job autonomy and job crafting is also supported by the research of Wrzesniewski and Dutton (2001), which states that high job autonomy encourages employees to alter the task and relational boundaries of their jobs and leads to perceived opportunities for job crafting. By enhancing job autonomy, employees perceive confidence to acquire new skills and experience more responsibility for problems occurring at work (Parker, 1998). These new skills can be used to further shape their task or relational boundaries and engage in job crafting.

## 2.5 Potential barriers of job crafting

Wrzeniewski and Dutton (2001) found that nurses are proactively involved in job crafting in all three types of job crafting: task crafting, cognitive crafting and relational crafting. However, they do experience barriers to job crafting (Harbridge et al., 2022). The potential barriers are based on the research of Harbridge et al. (2022) and the research of Tims and Bakker (2010).

### 2.5.1 Individual-level

According to Harbridge et al. (2022), a barrier for job crafting on the individual-level is the **lack of experience or skills** of nurses themselves. Nurses craft their jobs by initiating tasks based on their strengths and passion. When nurses experience a lack of knowledge, skills or experience with regard to certain tasks, they will be less motivated to craft their job design according to these tasks (Harbridge et al., 2022). Nurses who just started to work in the nursing profession have less experience, which may be seen as a barrier in comparison to colleagues who work for a longer time in the nursing profession (Harbridge et al., 2022). Based on the categories of years of experience which Harbridge et al. (2022) used, zero till five years of experience will be seen as little experience, which may be perceived as a lack of experience. The relationship between lack of knowledge or skills and the motivation to craft jobs among nurses has not been further researched.

### 2.5.2 Team-level

Several organizations make use of work teams where employees perform many of their tasks in team settings (Colquitt et al., 2002). According to Tims and Bakker (2010), team members share their knowledge and need to rely on the performance of their colleagues, therefore **task interdependence** can be perceived as high in work teams. When the performance of a task is dependent on the performance of colleagues, it may be difficult to proactively redesign the job, because this influences the job design of colleagues (Tims & Bakker, 2010). When employees perceive high task interdependence and engage in job crafting, they affect the tasks and jobs of their colleagues and need to anticipate on the work of others (Wrzesniewski & Dutton, 2001). Also, team members exchange resources, such as information (Wageman, 1995) and need to take into account the tasks of others (Wrzesniewski & Dutton, 2001). Therefore, they have less freedom to change the task and relational boundaries of their job. Thus, task interdependence may be perceived as a barrier of job crafting on team-level.

A second potential barrier on the team-level is the **perceived lack of managerial support** among nurses (Harbridge et al., 2022). When there is a lack of support from managers, this negatively influences the job crafting behavior of employees according to Wang et al. (2016). Management that provides an open, trusting and supportive climate may positively affect job crafting among employees (Wang et al., 2016). Employees need to feel trusted by their leaders, because this provides confidence by the employees and encourages personal growth. A leader who trusts their employees, creates a climate which accepts mistakes and sees it as a learning experience (Berg et al., 2008; Wang et al., 2016). A climate is considered open when leaders listen to ideas and individual needs of employees and take actions to address the matter raised (Wang et al., 2016).

### 2.5.3 Job-level

When nurses perceive a **heavy workload**, this negatively influences job crafting among nurses (Harbridge et al., 2022). The global shortage of nurses in combination with the COVID-19 pandemic increases the workload of nurses (Hall, 2020). A reason for this heavy workload may be insufficient staffing due to the shortage of nurses and infection or illness among nurses (Hall, 2020). Besides, nurses need to take care of a higher number of patients during the pandemic (Lasater et al., 2020; Hall, 2020). Therefore, heavy workload may be a relevant barrier nowadays.

In conclusion, the characteristics of the individual-, team- and job-level of job crafting are explained and shown in figure 1. Based on this explanation, the potential facilitators and barriers according to the existing literature are discussed and classified in the three levels of job crafting.

## 3. Methodology

This third chapter provides insights in how this research is conducted and analyzed. First, the research design will be elaborated on. In section 3.2 the method of data collection will be discussed. Hereafter, the method of data analysis will be elaborated on. Finally, the quality criteria which are taken into account will be discussed.

### 3.1 Research design

The aim of this research is to obtain in-depth information about the facilitators and barriers of job crafting among nurses on three levels, namely the individual-, team- and job-level.

Wrezniewski and Dutton (2001) state that job crafting is considered as a dynamic process and researching job crafting may raise methodological challenges for how to study practices of job crafting. Job crafting is related to the interpretation and subjectivity of how people see themselves in their work. In order to understand interpretations and the context of job crafting, in-depth information is needed. Therefore, a qualitative research will be conducted, in order to obtain depth and details (Remenyi et al., 1998).

This research is done in a deductive manner, which means that the existing theories are used as a starting point for this research (Myers & Myers, 2019). First, the existing literature has been reviewed about job crafting among nurses and the potential facilitators and barriers of job crafting behavior. The theories are operationalized and two code trees are developed. The first code tree includes the dimensions and indicators of facilitators for job crafting behavior on the three levels (see appendix A). The second code tree includes the barriers of job crafting behavior (see appendix B).

### 3.2 Data collection

In order to obtain enough data to answer the research question, ten interviews were conducted with nurses. Nine of these nurses work in different departments of four different hospitals in the Netherlands and one of them works in an nursing home for elderly people with dementia. The nurses differ in their specialisms. Their age varies between 22 and 30 years and they all have the Dutch nationality. For conducting the interviews, an interview protocol is followed, which consists of questions that relate to the four dimensions of job crafting: social job resources, structural job resources, hindering job demands and challenging job demands. An English interview protocol is translated to Dutch in order to conduct the interviews in Dutch. By conducting the interviews in Dutch, the native language of both the interviewees and

interviewer is used. This minimizes mistakes in interpretation. In order to adapt the interview to Dutch, the questions have been translated to Dutch by the researcher. Thereafter, this translation is checked by an independent person outside of the thesis circle. To check the translation, the independent person translated the Dutch question back to English. These translated questions and the original English question are compared to see if parts of the question do not get lost in translation. The English and Dutch versions of the interview protocol are included in Appendix C.

The data is gathered by conducting semi-structured interviews. This form of interviewing makes use of an interview guide, but provides the opportunity to ask follow-up questions (Hopf, 2004). The benefit of semi-structured interviews is that it addresses specific topics of the research, while leaving space for the participants to offer new insights and perspectives (Galletta, 2013). Six interviews are conducted physical and four interviews via online communication. Interviews were preferably conducted physical, because this makes it possible to observe non-verbal behavior of the interviewees, which can be important when interpreting the data. However, due to time schedules and preferences of the interviewees, four interviews were conducted online with camera on. Besides these ten interviews, two transcripts of interviews from other researchers are obtained.

### 3.3 Research ethics

The researcher-participant relationship raises ethical concerns. All of the interviewees were asked to sign a consent form to give their permission regarding the recording of the interview and the use of their answers in this research. This informed consent form, which can be found in appendix D, is written in Dutch, since the native language of all of the participants is Dutch, which makes it more readable and understandable. The consent form ensures that the collected data is made anonymous, answers cannot be linked to the respondents and personal data will be deleted as soon as possible, due to privacy concerns. Furthermore, the consent form contains contact information when the respondents want more information about this research or withdraw participation, since participation is voluntary. This consent form is sent to the participants before the interview took place, in order to give them time to read and understand this form. Besides, the main points of the consent form are repeated before signing the form, to ensure that they comprehend the information and give informed consent.

### 3.4 Data analysis

The method of template analysis is applied to analyze the data, for the reason that this method balances flexibility and structure in analyzing data (King & Brooks, 2017). Before analyzing, a code book is made with a priori codes, based on the literature about job crafting.

Subsequently, the ten interviews are transcribed. The software Atlas.ti is used to code the data of the twelve transcripts. First, the a priori codes were used to identify the relevant fragments of the interviews. During the coding process, new themes are identified and codes are developed. These codes are hierarchically ordered. This procedure led to the development of an initial template. With this template, the twelve interviews are coded. Considerations have been made whether themes are relevant for this research and represent the data. Therefore, the initial template is modified, which led to the final template that is used to code the data set.

### 3.5 Quality criteria

In order to ensure the quality of the research, quality criteria are taken into account. Guba and Lincoln (1989) identified four criteria for qualitative research, which are credibility, transferability, dependability and confirmability.

The credibility of the findings demonstrates a good fit between constructed realities of respondents and reconstructions attributed to them (Guba & Lincoln, 1989). The credibility is ensured by member checking, which means that the interpretations of the answers of participants are checked (Guba & Lincoln, 1989). When participants gave answers that could be interpreted in multiple ways, the semi-structured interview made it possible to ask what the participant meant with his or her answer.

In order to evaluate the transferability of the findings to other contexts, a description of the research case and the participants is given. This makes it possible for readers to decide if the findings can be transferred to other settings or contexts (Polit & Beck, 2010). According to Polit and Beck, the description of the research case is often not thick enough to fully decide to what extent the findings can be transferred to another setting. Information about the participants is part of the thick description. As Lincoln and Guba (1986) state “it is by no means clear how ‘thick’ a thick description needs to be” (p. 77). To increase transferability, as much details of the research as possible is described, but within the boundaries concerning the privacy of the participants.

The dependability of the research is increased by keeping notes about the decisions that has been made during the research process. This is not a full research diary, since it does not describe all the observed phenomena during the interviews, questions that arose during the

research and decisions that has been made (Burgess, 1981). Lastly, a codebook is developed to ensure confirmability (see appendix E). This codebook gives the reader the possibility to investigate how the findings derived from the data.

## 4. Results

The fourth chapter of this research presents the results of this qualitative research. First, the identified facilitators of job crafting will be discussed. This will be followed by the identified barriers of job crafting.

### 4.1 Facilitators of job crafting

#### 4.1.1 Individual-level

Eleven out of the twelve respondents indicated that they actively seek information, for example by asking questions to their colleagues or following a training. Therefore, it helps increasing their level of structural resources. Respondent 2 indicates: *“I really like to develop myself and then I look up literature, for example, and I find out that what we are doing is actually very old-fashioned.”* This respondent takes the initiative to find information which helps her to further develop work processes. According to respondent 3, a motivation for seeking information is the following: *“Look, I’ve been graduated since last fall. I’m just not done learning things as far as I am concerned.”* Nurses who have a **proactive personality** seem to engage more in job crafting, since they seek information, which helps increasing the level of structural job resources. Furthermore, nurses seek opportunities to bring change in their environment, which may increase their level of challenging job demands.

Only two respondents mentioned that they believe in their own skills and capabilities to execute their tasks. The belief that nurses successfully reach desired outcomes could not be identified. Therefore, **self-efficacy** has not been confirmed as a facilitator on the individual-level by this study.

One of the respondents answered that the fact that she just finished her education and **perceives a lack of experience or skills**, is an incentive for her to further develop herself, because she feels a pressure to perform well. Her answer on the question if she perceives the lack of experience or skills as a barrier is the following: *“I actually think not, because yes, I also feel a certain pressure to perform. If I notice that someone else can do something better than me, then that just motivates me to do it well”* (Respondent 3).

#### 4.1.2 Team-level

The perceived **managerial support** is identified as a facilitator of job crafting behavior by the respondents. A leadership style in which the leader is approachable and open for feedback, motivates the nurses to reach out to their supervisor when they want to discuss opportunities to develop themselves. As respondent 6 stated: *“The supervisor was open to feedback, wanted*

to create the best possible working atmosphere for us, so that we could indeed be the best we could be.” When management offers and provides opportunities for growth or development, the respondents indicate that it is easier to follow courses. Respondent 3 indicated: *“Well I have to say that it's really nice that you actually already have the online platform where you can subscribe. That makes it just a little bit easier to say 'oh let me see if there's anything new there' or if there are things I'd like to be involved in.”* When management provides these opportunities, this increases the level of structural job resources. Management which is involved with the nurses and are accessible is also perceived as a motivational factor to reach out to them. Respondent 4 states: *“Ehm, I think it is important that he or she is approachable and involved with the team and indeed listens to what the team wants, what they need and then gets to work on it sincerely and also gives feedback.”*

Next to the leadership style, **support from colleagues** is perceived as a facilitator as well. This support is facilitated by accessible contact between colleagues. As respondent 3 indicates: *“And just accessible contact, that everyone is just open to learning, because everyone started somewhere.”* Accessible contact with colleagues helps nurses to ask questions and support each other, which enhances the level of social and structural job resources. Also, respondent 5 indicates that when the level of trust is high between colleagues, she would ask question faster: *“I think it's really the trust you get, what you feel. That's for me that makes me go to someone quickly or that I think 'well I solve it myself'.”*

**Task interdependence** is mentioned as a facilitator of job crafting behavior besides a barrier. Respondent 9 indicated that she follows a course to get the knowledge and skills about heart rhythm monitoring, so task interdependence decreases or disappears. In this example, task interdependence is perceived as a facilitator to further develop herself and thereby increase structural job resources.

#### 4.1.3 Job-level

The level of **job autonomy** that nurses perceive is varying. As respondent 7 indicates: *“Um, well, it's kind of mixed. I think when you're in the room, (...), you do have things to contribute and so on, um, but ultimately, the doctor ultimately decides at the end what to do with it. Um, and then you have your other tasks, that's where you're actually kind of free to do anything.”* Based on the answer of the respondent, the job design provides freedom in additional tasks they want to execute. However, the job design does not provide the freedom to decide independently which procedures need to be followed, because this is the responsibility of the doctors. Despite the limited job autonomy, nurses have autonomy to execute tasks at their

own discretion if they can motivate why, according to respondent 3: *“Um, I think it helps a lot that we have reasonable freedom to do things in a different way, when you can properly justify why you're doing it in a different way.”* Job autonomy leads to nurses who experience more responsibilities and alter their task and relational boundaries. An example of altering the task boundaries of respondent 3 is the following: *“Actually then I have to call a doctor like 'yes, I see this and this and this', I actually want to send some urine to the lab. Yes, often by then I've already done that, ordered and sent it myself (...).”*

## 4.2 Barriers of job crafting

### 4.2.1 Individual-level

Multiple respondents indicated that they **perceive a lack of experience or skills** in their job. A lot of the respondents are relatively new in the nursing profession. They indicated that it is mostly the experience they lack, because they learned the skills during their education. Respondent 5 indicated: *“Um, well, I don't think so much in terms of skills. Indeed, because of course you have had all that during your studies (...) So I don't notice that I'm a novice nurse, it's purely the experience itself.”* The lack of experience or skills is perceived as a barrier of job crafting, because in that situation nurses take less initiative and listen to the more skilled colleagues or the colleagues with more experience. Respondent 2 answered that lack of experience hinders her in crafting her job: *“Yes, you allow yourself to be led. Sometimes you literally stand there like tell me what to do.”*

### 4.2.2 Team-level

**Task interdependence** within the team of nurses is little mentioned by the respondents. When the nurses do not have all the competences they need to execute their tasks, they can experience task interdependence. Respondent 9 experiences task interdependence within the team, to illustrate: *“In our department, things are a bit different because we also have heart rhythm monitoring and I'm not allowed to do that yet. So basically everything that has to do with that I am dependent on my colleague, so I am indeed constantly waiting for my colleague to have time to do that for me.”* In this example, respondent 9 need to wait on her colleague before she can execute her further tasks. Therefore, task interdependence is perceived as a barrier.

Eight of the respondents answered that they **perceive a lack of managerial support**, which means from their supervisor or higher levels of management. Nurses experience this as a barrier of job crafting, because this lack of support does not encourage nurses to develop

themselves and come up with new ideas. Respondent 9 answered that the lack of support is a barrier for challenging job demands: “(...) and, um, I also do think that it's not really encouraged from the department.” Besides, lack of mutual trust between the employer and employee influences the social job resources of the nurse, since this hinders nurses to ask feedback or help from management. Respondent 12 indicates: “As if I had to continuously prove what I could do, instead of leading from trust. And that was the biggest difference and I don't thrive on that, leading from micro-management. That's not where I go to ask for help.” Furthermore, two respondents indicate that management does not have the resources to provide development opportunities to nurses, an example which respondent 12 states: “They want to give a lot of freedom, but they don't always have the opportunity or the budget, or the space.”

A third barrier of job crafting behavior according to respondents is **issues between colleagues**. Respondent 9 stated: “Yes, of course you always have some colleagues who, um, (...), but you notice that they, um, don't really appreciate it when you ask them something. I always find that an obstacle to ask something to someone.” Moreover, respondent 2 mentioned that gossiping among colleagues hinders her to ask questions to colleagues, because she wonders if that lead to colleagues gossiping about her. Therefore, issues between colleagues hinders nurses to increase their level of social job resources.

#### 4.2.3 Job-level

A **heavy workload** is mentioned by all the respondents as a barrier for job crafting. This heavy workload serves as a barrier on the four dimensions of job crafting, namely the social and structural job resources and the challenging and hindering job demands. As one of the respondents say about the social job resources: “If the workload is high, it is difficult to ask feedback, because that takes time and you do not always have time” (respondent 2). A heavy workload hinders nurses to ask for feedback or help from colleagues or the supervisor and causes them to receive less support. It also prevents them from taking the opportunity to enhance their skills and abilities, because courses, training and other opportunities to expand their resources take time, which they do not have in the workplace. Therefore, this means that they need to develop themselves in their leisure. The same counts for challenging job demands. Nurses want to take part in projects to develop knowledge and skills. However, due to a heavy workload, they need to do this at home during their own time. When nurses experience job demands as overwhelming, the heavy workload hinders them from asking help from their colleagues to decrease hindering job demands. Especially, when they experience

insufficient staffing in the workplace. . Respondent 1 indicated the following: *“You probably have that in your preparation, in healthcare there is simply a huge problem in terms of personnel.”* The same respondent indicated that insufficient staffing is a barrier in decreasing hindering job demands, since this leads to a situation in which the nurse cannot ask authorized colleagues to take over a task. As a consequence, the nurse executes tasks that he or she is not mentally ready for.

Furthermore, nurses perceived a **lack of recognition in the nursing profession** as a barrier to increase their structural job resources and challenging job demands. Nurses experience a lack of reward for developing themselves. Respondent 1 states: *“You can learn a lot, but sometimes there is little in return. If you have learned something new or taken a course, you also want to get recognition for it, so to speak. And sometimes you miss that a little.”* This lack of recognition also appears in the fact that there is no function differentiation between MBO-educated and HBO-educated nurses. *“Now, in the hospital, a MBO-nurse earns as much as a HBO-nurse, even though you did a completely different study.”* (Respondent 1).

The third barrier for job crafting that nurses experience is the **regulations** in the nursing profession. Protocols hinder nurses to alter their task boundaries. Respondent 6 states: *“Well, I think in some things there is really, um, little room to really give your own interpretation, because you just, indeed, have to work according to certain protocols.”*

The identified facilitators and barriers of job crafting behavior on the individual-, team- and job-level are shown in table 1. Also, the founded facilitators and barriers are added into the tree structures in appendix A and appendix B.

<b>Facilitators</b>	
Individual-level	<ul style="list-style-type: none"> <li>- Proactive personality</li> <li>- Perceived lack of experience or skills</li> </ul>
Team-level	<ul style="list-style-type: none"> <li>- Managerial support</li> <li>- Support from colleagues</li> <li>- Task interdependence</li> </ul>
Job-level	<ul style="list-style-type: none"> <li>- Job autonomy</li> </ul>
<b>Barriers</b>	
Individual-level	<ul style="list-style-type: none"> <li>- Perceived lack of experience or skills</li> </ul>

Team-level	<ul style="list-style-type: none"> <li>- Task interdependence</li> <li>- Perceived lack of managerial support</li> <li>- Issues between colleagues</li> </ul>
Job-level	<ul style="list-style-type: none"> <li>- Heavy workload</li> <li>- Lack of recognition in the nursing profession</li> <li>- Regulations</li> </ul>

*Table 1. Identified facilitators and barriers of job crafting on the individual-, team-, and job-level*

## 5. Conclusion

The aim of this research was to contribute to the literature about job crafting among nurses by identifying the indicators and facilitators of job crafting with a multilevel perspective. This research answered the following research question: *What are the facilitators and barriers of job crafting that nurses perceive at the individual-, team- and job-level?*

The results of this study show that nurses perceive facilitators and barriers of job crafting on all three levels, namely the individual-, team- and job-level. This research examined barriers and facilitators identified by existing literature as well as newly found facilitators and barriers with a multilevel perspective.

First, on the individual-level, a proactive personality facilitates taking initiative to craft the job. Also, a lack of experience or skills is perceived as a facilitator as well as a barrier on the individual-level. On the one side, a lack of experience or skills causes taking less initiative and following the prescribed procedures. On the other side, it can cause a pressure to perform which facilitates job crafting behavior. Self-efficacy is not confirmed as a facilitator, since self-belief in capabilities is mentioned by one respondent, but the belief that the individual could successfully reach desired outcomes has not been identified.

When looking at the team-level of job crafting, managerial support as well as support from colleagues facilitate job crafting behavior among nurses. Nurses perceive task interdependency as a barrier as well as a facilitator. When nurses are dependent on each other of the performing of tasks, they cannot craft their task, due to this dependency. On the other side, task interdependency drives nurses to craft their job in a way that reduces this dependency.

On the job-level, job autonomy provides nurses the opportunity to shape their tasks to their own insights. A barrier to job crafting on this level is the heavy workload that nurses experience, partly because of insufficient staffing. Secondly, the lack of recognition and reward in the nursing profession is perceived as a barrier. The last perceived barrier are regulations in the nursing profession. Nurses need to work according to protocols, which decreases the freedom to shape the relational, cognitive and task boundaries.

## 6. Discussion

This chapter discusses the findings of this research. First, the interpretation of the results will be discussed. Subsequently, the role of the researcher will be elaborated on. Hereafter, the practical implications will be discussed, followed by the limitations and directions for further research.

### 6.1 Interpretation of the results

Based on the research of Tims and Bakker (2010), self-efficacy was expected to be a facilitator of job crafting behavior. In contrast to this expectation, self-efficacy could not be identified as a facilitator in this research. Self-belief in capabilities is mentioned, which may point to self-confidence of the nurse. Self-confidence refers to the strength of belief in oneself, but it is not necessarily specified what the individual has to deal with (Bandura, 1997). Since the participant did not explain desired outcomes of the tasks she needed to deal with, self-efficacy could not be identified. However, this does not mean that self-efficacy is not a facilitator of job crafting behavior among nurses.

Another interesting finding, is the perceived lack of experience and skills which is identified as a facilitator as well as a barrier of job crafting behavior in this research. Harbridge et al. (2022) identified the lack of experience or skills as a barrier. However, according to one of the respondents, the perception of the lack of experience or skills motivates her to further develop herself due to a pressure to perform well in her job. Therefore, a perceived lack of experience or skills is identified as a facilitator of self-development next to the expectation that it serves as a barrier of job crafting behavior.

Furthermore, this research found that if nurses experience support from colleagues, this also facilitates job crafting behavior. This facilitator was not expected based on the literature which is discussed in the theoretical framework (see chapter 2). However, research of Tims and Parker (2020) showed that the reaction of colleagues influence the affective outcomes of proactive employee behaviors. This research identified trust propensity as a moderator of job crafting behavior and the impact of job crafting on the colleagues, which support our finding of trust as an indicator of support from colleagues. Based on the research of Tims and Parker (2020), the execution of job crafting behavior can be influenced by colleagues, since positive reaction of colleagues could influence the job crafter. This could explain why nurses experience support from colleagues as a facilitator of job crafting. The research of Tims and Parker (2020) also support the finding of issues between colleagues as a

barrier of job crafting behavior. This is rather complex, since a negative response of colleagues can be based on multiple factors, like the available information about the job crafter, the context and personal motives of the colleague (Tims & Parker, 2020). However, when colleagues experience a negative impact of job crafting behavior, they may negatively impact this behavior according to Tims and Parker (2020). This may explain why a nurse may be judged based on asking questions, since this takes time to explain and with the heavy workload nurses experience, they do not always have time to explain something.

This research found that task interdependency is perceived as a barrier, which is consistent with the expectation based on literature (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001), but also as a facilitator of job crafting behavior. The finding that task interdependency is perceived as a facilitator by nurses is an unexpected result.

The lack of recognition in the nursing profession is found as a barrier of job crafting behavior. According to Seitovirta et al. (2018) financial as well as non-financial rewards are appreciated by nurses. As a non-financial reward, the opportunities to develop are perceived as an appreciated manner of rewarding (Seitovirta et al., 2018). Thus, rewards are appreciated by the nurses. However, the relationship between the lack of rewards and job crafting behavior is not explained by literature.

## 6.2 Role of the researcher

With qualitative research, the subjective interpretation of the researcher guides the formulation of hypotheses, selected methodologies and interpreting data (Ratner, 2002). This needs to be taken into account while analysing, interpreting and writing the results.

In order to collect data, semi-structured interviews were conducted. During these interviews, the interviewees sometimes indicated that the theoretical questions were difficult to understand. Especially the questions concerning the four dimensions of job resources and job demands were difficult to translate to the context of the nurses. To better understand the questions, the researcher occasionally steered the interviewees by giving examples. As a consequence, nurses could be led by these examples.

Furthermore, the interview protocol is not always exactly followed. Since question 8 of the interview is added later in the process, the first interview does not include this question about managerial support. Besides, the formulation of the questions was not always the same as how it is written down in the interview protocol. In some of the interviews, the interviewees already answered further questions out of their own. For example, regarding the questions about

the facilitators and barriers regarding the four dimensions. For this reason, this question has not been asked again or the interviewees were asked to repeat their answer shortly.

### 6.3 Practical implications

This research has practical implications for organizations, supervisors and individuals in the nursing profession. Nursing management may want to stimulate job crafting behavior among nurses and nurses themselves may want to engage in job crafting. The multilevel perspective which is applied in this research, gives them insights into which facilitators and barriers they can influence and which are beyond their control. Based on this overview, they can make changes to reduce the barriers and increase facilitators in order to stimulate job crafting behavior. The same counts for nurses themselves, because they also get insights in which factors stimulate their own job crafting behavior.

Besides, this research contributes to people's awareness of the barriers and facilitators that they might cause. When, for example, the supervisor want to support job crafting behavior, this research shows that the supervisor must be aware of the adopted leadership style.

### 6.4 Theoretical implications

This research added to the existing literature, because a multilevel model is developed which contains the individual-, team- and job-level of job crafting. By classifying facilitators and barriers with this model, it is more clear which of these facilitators and barriers are of personal or contextual influence. This contributes to the literature, since this model was not identified. Besides, new facilitators and barriers are identified which influences job crafting behavior of nurses.

### 6.5 Limitations

A limitation of this research is that one of the respondents works as a nurse in a nursing home for demented elderly instead of a hospital. Due to limited access to nurses working in a hospital, one respondent worked in a nursing home. While she is a nurse, the work context differs, which may impact the nurse's experience in relation to the perceived facilitators and barriers.

Secondly, all of the respondents were under the 30 years old. Therefore, the representativity of the sample is lower, because of the narrow age range. The respondents do not have a lot of experience in years, which may impact the results of this research.

### 6.6 Directions for further research

Further research is needed on self-efficacy as a facilitator of job crafting behavior among nurses. It would be interesting to further research the effect of self-confidence on job crafting behavior and the relationship between self-confidence and self-efficacy among nurses. This might explain if self-confidence is a condition of self-efficacy.

Moreover, further research could focus on the relationship between rewards and job crafting behavior of nurses. Insights in which rewards motivates nurses the most to craft their job, could give organizations insights into what kind of rewards they could offer to enhance job crafting behavior. Also, the underlying reason why a the lack of experience or skills and task interdependency can be perceived as a facilitator as well as a barrier would be interesting.

A last recommendation for further research is to add the organizational-level of job crafting into this multilevel perspective. This would complete the model of multiple levels and gives further insights in the actions organizations can take to stimulate job crafting behavior.

## References

- Anderson, M. H., & Sun, P. Y. T. (2017). Reviewing leadership styles: overlaps and the need for a new 'full-range' theory. *International Journal of Management Reviews*, *19*, 76-96. <https://doi-org.ru.idm.oclc.org/10.1111/ijmr.12082>
- Atefi, N., Abdullah, K. L., Wong, L. P., & Mazlom, R. (2014). Factors influencing registered nurses' perception of their overall job satisfaction: A qualitative study. *International Nursing Review*, *61*(3), 352–360. <https://doi-org.ru.idm.oclc.org/10.1111/inr.12112>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, *22*(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2018). Multiple levels in job demands-resources theory: Implications for employee well-being and performance. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, *10*(2), 170-180. <https://doi.org/10.1037/1076-8998.10.2.170>
- Bakker, A. B. (2017). Job crafting among health care professionals: The role of work engagement. *Journal of Nursing Management*, *26*(1), 321-331. <https://doi.org/10.1111/jonm.12551>
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. W.H. Freeman and Company.
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, *14*, 103-118. <https://doi.org/10.1002/job.4030140202>
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2008). What is Job Crafting and Why Does It Matter? Retrieved from the Center for Positive Organizational Scholarship on January, 25, 2022.
- Blanco-Donoso, L. M., Garrosa, E., Moreno-Jiménez, B., De Almeida, E. C., & Villela-Bueno, S. M. (2017). Social Job Resources as Sources of Meaningfulness and its Effects on Nurses' Vigor and Emotional Exhaustion: A Cross-Sectional Study Among Spanish Nurses. *Current Psychology*, *36*, 755-763. <https://doi.org/10.1007/s12144-016-9463-x>
- Burgess, R. G. (1981). Keeping a research diary. *Cambridge Journal of Education*, *11*(1), 75-83. <https://doi.org/10.1080/0305764810110106>
- Caprara, G. V., Alessandri, G., Barbaranelli, C., & Vecchione, M. (2013). The longitudinal relations between self-esteem and affective self-regulatory efficacy. *Journal of Research in Personality*, *47*(6), 859-870. <https://doi.org/10.1016/j.jrp.2013.08.011>
- Colquitt, J. A., Hollenbeck, J. R., Ilgen, D. R., LePine, J. A., & Sheppard, L. (2002). Computer-Assisted communication and Team Decision-Making Performance: The

- Moderating Effect of Openness to Experience. *Journal of Applied Psychology*, 87(2), 402-410. <https://doi.org/10.1037//0021-9010.87.2.402>
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435-462. <https://doi.org/10.1177/014920630002600304>
- Daouk-Öyry, L., Anouze, A. L., Otaki, F., Dumit, N. Y., & Osman, I. (2014). The JOINT model of nurse absenteeism and turnover: a systematic review. *International Journal of Nursing Studies*, 51(1), 93-110. <https://doi.org/10.1016/j.ijnurstu.2013.06.018>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Falatah, R. (2021). The Impact of the Coronavirus Disease (COVID-19) Pandemic on Nurses' Turnover Intention: An Integrative Review. *Nursing Reports*, 11, 787-810. <https://doi.org/10.3390/nursrep11040075>.
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond*. New York University Press.
- Gordon, H. J., Demerouti, E., Le Blanc, P. M., Bakker, A. B., Bipp, T., & Verhagen, M. A. M. T. (2018). Individual job redesign: Job crafting interventions in healthcare. *Journal of Vocational Behavior*, 104, 98-114. <http://dx.doi.org/10.1016/j.jvb.2017.07.002>.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a Theory. *Organizational Behavior and Human Performance*, 16, 250-279. [https://doi.org/10.1016/0030-5073\(76\)90016-7](https://doi.org/10.1016/0030-5073(76)90016-7).
- Hall, H. (2020). The effect of the COVID-19 pandemic on healthcare workers' mental health. *Journal of the American Academy of Physician Assistants*, 33(7), 45-48. <https://doi.org/10.1097/01.JAA.0000669772.78848.8c>
- Harbridge, R., Ivanitskaya, L., Spreitzer, G., & Boscart, V. (2022). Job crafting in registered nurses working in public health: A qualitative study. *Applied Nursing Research*, 64. <https://doi.org/10.1016/j.apnr.2021.151556>.
- Hersey, P., Blanchard, K. H., & Natemeyer, W. E. (1979). Situational leadership, perception, and the impact of power. *Group & Organization management*, 4, 418-428. <https://doi.org/10.1177/105960117900400404>
- Hopf, C. (2004). Qualitative Interviews: An Overview. In: Flick, C., Von Kardoff, E. & Steinke, I. (2004). *A Companion to Qualitative Research*. SAGE Publications.
- Ilgén, D. R., & Hollenbeck, J. R. (1992). The structure of work: job design and roles. In: M. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 165-207). Consulting Psychologists Press.

Karasek, R. A. (1979) Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285-308.  
<https://doi.org/10.2307/2392498>

King, N., & Brooks, J. M. (2017). *Template analysis for Business and Management students*. SAGE Publications Ltd.

Klein, K. J., & Kozlowski, S. W. J. (2000). From micro to meso: critical steps in conceptualizing and conducting multilevel research. *Organizational Research Methods*, 3(3), 211-236. <https://doi-org.ru.idm.oclc.org/10.1177/109442810033001>

Lasater, K. B., Aiken, L. H., Sloane, D. M., French, R., Martin, B., Reneau, K., Alexander, M., & McHuhg, M. D. (2020). Chronic hospital nurse understaffing meets COVID-19: an observational study. *British Medical Journal*, 30(8), 638-647.  
<http://dx.doi.org/10.1136/bmjqs-2020-011512>

Lincoln, Y., & Guba, E. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. In D. Willimas (Ed.) *Naturalistic Evaluation* (pp. 73-84). Jossey Bass.

Meijman, T. F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. D. Drenth, H. Thierry, & C. J. de Wolff (Eds.), *Handbook of work and organizational: Work psychology* (pp. 5-33). Taylor & Francis.

Myers, M. D., & Myers, M. W. (2019). *Qualitative Research in Business and Management* (3th edition). SAGE Publications.

Parker, S. K. (1998). Enhancing Role Breadth Self-Efficacy: The Roles of Job Enrichment and Other Organizational Interventions. *Journal of Applied Psychology*, 83(6), 835-852.  
<https://doi.org/10.1037/0021-9010.83.6.835>

Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, 33, 1120-1141. <https://doi-org.ru.idm.oclc.org/10.1002/job.1783>.

Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451-1458.  
<https://doi.org/10.1016/j.ijnurstu.2010.06.004>

Ratler, C. (2002). Subjectivity and objectivity in qualitative methodology. *Forum Qualitative Social Research*, 3(3), art. 16. <https://www.qualitative-research.net/index.php/fqs/article/view/829/1800>.

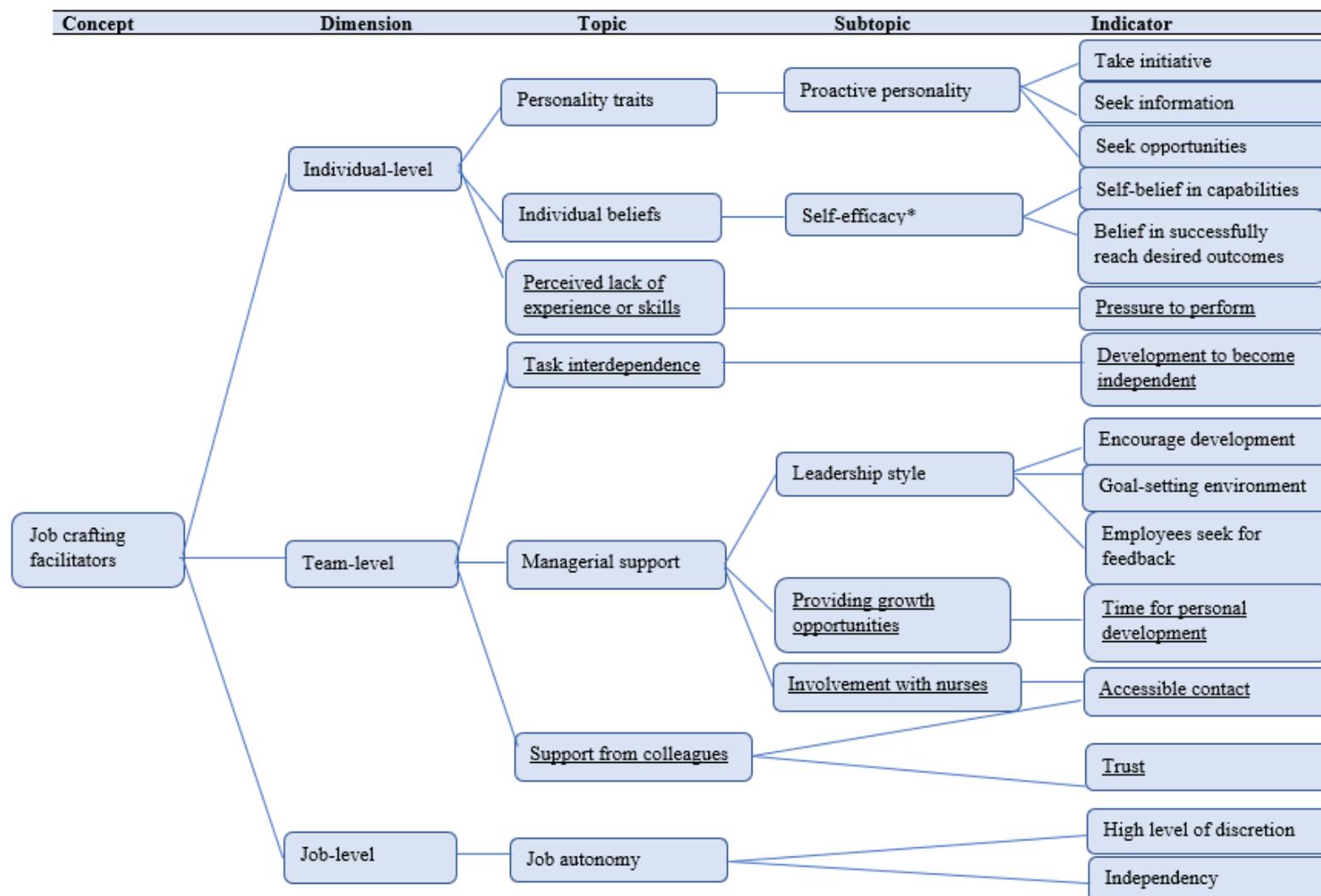
Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management: An Introduction to Process and Method*. SAGE Publications.

Rudolph, C. W., Katz, I. M, Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102, 112-138. <https://doi.org/10.1016/j.jvb.2017.05.008>

- Seitovirta, J., Lehtimäki, A. V., Vehviläinen-Julkunen, K., & Mitronen, L. (2018). Registered nurses' perceptions of rewarding and its significance. *Journal of Nursing Management*, 26(4), 457-466. <https://doi.org/10.1111/jonm.12571>
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2), 1-9. <https://doi.org/10.4102/sajip.v36i2.841>
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173-186. <https://doi.org/10.1016/j.jvb.2011.05.009>
- Tims, M., Bakker, A. B., Derks, D., & Van Rhenen, W. (2013). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management*, 38(4), 427-454. <https://doi-org.ru.idm.oclc.org/10.1177/1059601113492421>
- Tims, M., & Parker, S. K. (2020). How coworkers attribute, react to, and shape job crafting. *Organizational Psychology Review*, 10(1), 29-54. <https://doi.org/10.1177/2041386619896087>
- Tims, M., Twemlow, M., and Fong, C. Y. M. (2022). A state-of-the-art overview of job-crafting research: current trends and future research directions. *Career Development International*, 27(1), 54-78. <https://doi.org/10.1108/CDI-08-2021-0216>
- Van Wingerden, J., & Poell, R. F. (2017). Employees' perceived opportunities to craft and in-role performance: the mediating role of job crafting and work engagement. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01876>
- Wang, H., Demerouti, E., & Bakker, A. B. (2016). A review of job crafting research: The role of leader behaviors in cultivating successful job crafters. In S. K. Parker, Wageman, R. (1995). Interdependence and Group Effectiveness. *Administrative Science Quarterly*, 40(1), 145-180.
- Wheeler, A. R., Halbesleben, J. R. B., & Harris, K. J. (2012). How job-level HRM effectiveness influences employee intent to turnover and workarounds in hospitals. *Journal of Business Research*, 65(4), 547-554. <https://doi.org/10.1016/j.jbusres.2011.02.020>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of management review*, 26(2), 179-201. <https://doi.org/10.2307/259118>
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121-141. <https://doi.org/10.1037/1072-5245.14.2.121>
- Yepes-Baldó, M., Romeo, M., Westerberg, K., & Nordin, M. (2018). Job crafting, employee well-being, and quality of care. *Western Journal of Nursing Research*, 40(1), 52-66. <https://doi.org/10.1177/0193945916680614>
- Zhang, X., & Bartol, K. M. (2010). Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative

Process Engagement. *Academy of Management Journal*, 53(1), 107-128.  
<https://doi.org/10.5465/AMJ.2010.48037118>

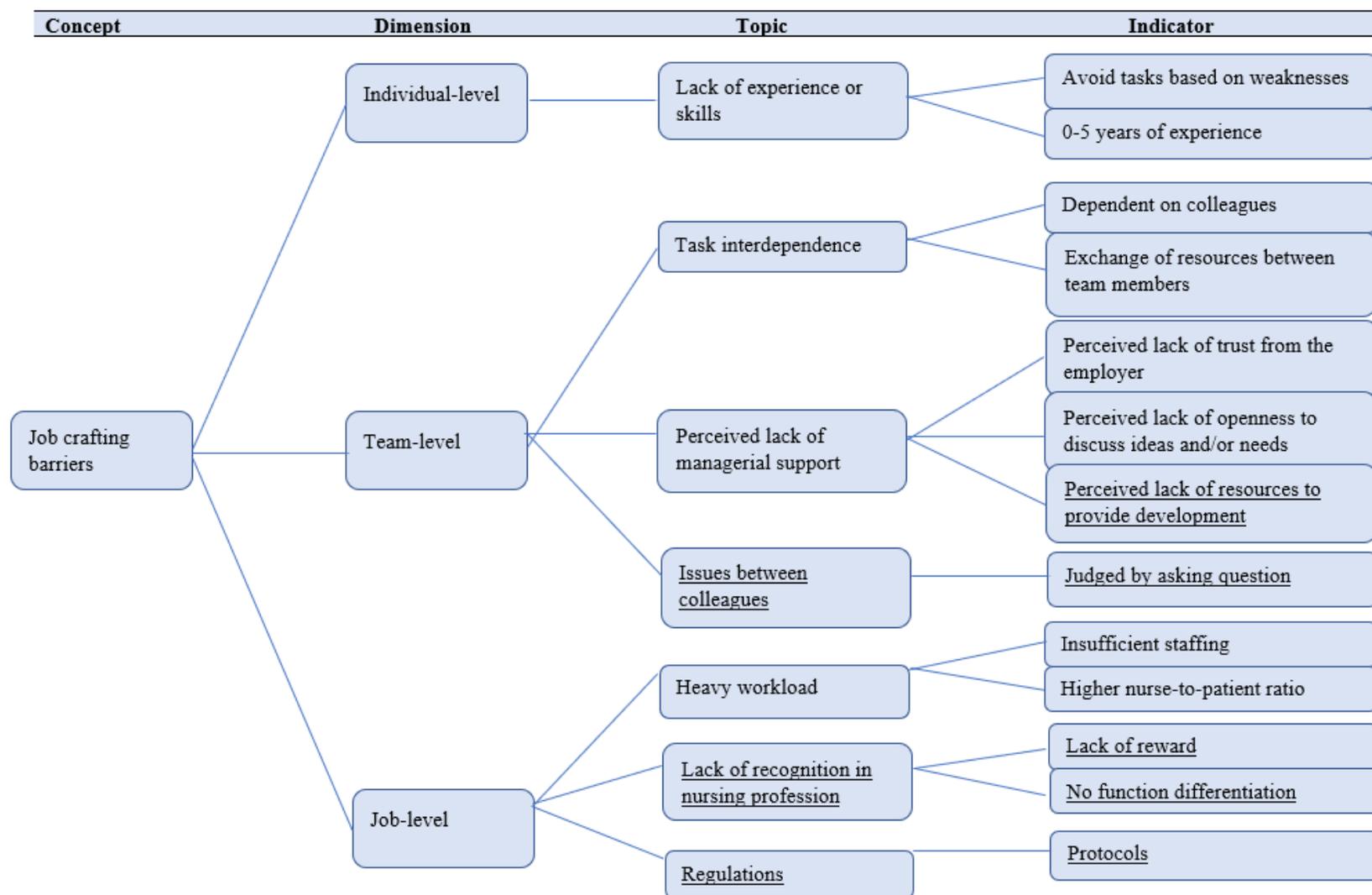
## Appendix A – Tree structure facilitators



\*This concept is not confirmed by this study, but identified based on literature.

*Underlined concepts are added after analyzing.*

## Appendix B – Tree structure barriers



*Underlined concepts are added after analyzing.*

## Appendix C – Interview Protocol

### English version

*Thank you for agreeing to participate in this study. In the following 30 minutes or so I will ask you a set of questions that revolve around your tasks at work and the way you perform them.*

1. Can you please describe for me the nature of your job? (outpatient/inpatient nurse)
2. Can you describe to me your daily tasks in terms of:
  - The tasks that you do that involve interacting with other individuals (colleagues and patients)
  - The tasks that you conduct alone
3. Sometimes we like to add our own “touch” to our jobs and the way we conduct the tasks that fall under it. Can you tell me how do you think you do your job differently from others in comparable jobs ?
4. Have you ever heard about the concept of job crafting? [even if the participant has heard of the concept of job crafting before, please provide him or her with the definition below]

Job crafting includes the set of changes that employees engage in at work in order to achieve a better match between their needs and preferences and their jobs. Employees who engage in job crafting shape their job demands and resources in order to create a work environment that enables them to perform better in.

JC can be divided into the four dimensions outlined in the table below:

<b>Increasing Social Job Resources</b>
<i>I ask my supervisor to coach me</i>
<i>I ask whether my supervisor is satisfied with my work</i>
<b>Increasing Structural Job Resources</b>
<i>I try to develop my capabilities</i>
<i>I try to learn new things at work</i>
<b>Decreasing Hindering Job Demands</b>
<i>I manage my work so that I try to minimize contact with people whose problems affect me emotionally</i>
<i>I make sure that my work is mentally less intense</i>
<b>Increasing Challenging Job Demands</b>

*When an interesting project comes along, I offer myself proactively as project co-worker*

*When there is not much to do at work, I see it as a chance to start new projects*

5. I am now going to go through each of the dimensions that I mentioned and ask you specific questions about them:

#### **Increasing Social Job Resources**

- Can you please elaborate on the possibility of engaging in this dimension in your job context?
- What do you think are the facilitators of increasing your social job resources in your job context?
- What do you think are the barriers to increasing your social job resources in your job context?
- What impact do you think COVID-19 has had on increasing your social job resources in your job context?

#### **Increasing Structural Job Resources**

- Can you please elaborate on the possibility of engaging in this dimension in your job context?
- What do you think are the facilitators of increasing your structural job resources in your job context?
- What do you think are the barriers to increasing your structural job resources in your job context?
- What impact do you think COVID-19 has had on increasing your structural job resources in your job context?

#### **Increasing Challenging Job Demands**

- Can you please elaborate on the possibility of engaging in this dimension in your job context?
- What do you think are the facilitators of increasing your challenging job demands in your job context?
- What do you think are the barriers to increasing your challenging job demands in your job context?
- What impact do you think COVID-19 has had on increasing your challenging job demands in your job context?

#### **Decreasing Hindering Job Demands**

- Can you please elaborate on the possibility of engaging in this dimension in your job context?
- What do you think are the facilitators of decreasing your hindering job demands in your job context?
- What do you think are the barriers to decreasing your hindering job demands in your job context?

- What impact do you think COVID-19 has had on decreasing your hindering job demands in your job context?
6. Can you please provide me with some job crafting examples that you have initiated in your job or you have witnessed someone initiate in their job and that you thought were effective/ successful?

You yourself:

- What did you do?
- What was the reason behind this JC behavior?
- How did this JC behavior make you feel?
- What was the outcome of this JC behavior?

Another person:

- What did they do?
- What was the reason behind this JC behavior?
- How did this JC behavior make them feel?
- What was the outcome of this JC behavior?

7. Can you please provide me with some job crafting examples that you have initiated in your job or you have witnessed someone initiate in their job and that you thought were ineffective/ unsuccessful?

You yourself:

- What did you do?
- What was the reason behind this JC behavior?
- How did this JC behavior make you feel?
- What was the outcome of this JC behavior?

Another person:

- What did they do?
- What was the reason behind this JC behavior?
- How did this JC behavior make them feel?
- What was the outcome of this JC behavior?
- 

When looking for a specific actor in job crafting behavior, the role of management is found to be related. Managerial support can be seen as the extent to which managers value employees' contributions and care for their well-being, by showing consideration, acceptance and concern for the needs and feelings of other employees.

8. How would you best describe the support you receive from management?

- In which way do you experience that this contributes to your engagement in increasing your social resources?

- In which way do you experience that this contributes to your engagement in increasing your structural resources?

- In which way do you experience that this contributes to your engagement in the increase of your challenging job demands?

- In which way do you experience that this contributes to your engagement in the decreasing of your hindering job demands?

## Dutch version

### **Interview protocol thesis job crafting among nurses – Nederlandse versie**

Dank u voor uw deelname aan dit onderzoek. In de komende 30 à 40 minuten zal ik u een reeks vragen stellen die betrekking hebben op uw taken en de manier waarop u deze uitvoert binnen uw functie.

1. Kunt u mij de kern van uw functie beschrijven? (poliklinisch / opname verpleegkundige)
2. Kunt u voor mij uw dagelijkse taken omschrijven met betrekking tot:
  - De taken die u uitvoert waarbij u contact heeft met andere personen (collega's / patiënten)
  - De taken die u alleen uitvoert
3. Soms willen we onze eigen "draai" geven aan onze baan en de manier waarop we de bijbehorende taken uitvoeren. Kunt u mij vertellen hoe u denkt dat u uw werk anders uitvoert dan collega's in soortgelijke functies?
4. Heeft u gehoord van het concept 'job crafting'? [zelfs als de deelnemer heeft gehoord van het concept van job crafting, geef hem of haar dan de onderstaande definitie]

Job crafting omvat de reeks veranderingen die werknemers op het werk doorvoeren om een betere aansluiting te bereiken tussen hun behoeften en voorkeuren, en hun baan. Werknemers die aan job crafting doen, geven vorm aan hun functie-eisen en middelen om een werkomgeving te creëren waarin ze beter kunnen presteren.

Job crafting kan worden onderverdeeld in de vier dimensies die in de onderstaande tabel worden beschreven:

<b>Toenemen van sociale middelen in je functie 'Social Job Resources'</b>
---

<i>Ik vraag mijn leidinggevende om mij te coachen.</i>
--

<i>Ik vraag of mijn leidinggevende tevreden is over mijn werk.</i>
<b>Toenemen van structurele middelen in je functie ‘Structural Job Resources’</b>
<i>Ik probeer mijn capaciteiten te ontwikkelen.</i>
<i>Ik probeer nieuwe dingen te leren op het werk.</i>
<b>Toenemen van uitdagende functie-eisen ‘Challenging Job Demands’</b>
<i>Wanneer er een interessant project voorbij komt, bied ik mijzelf proactief aan als collega voor het project.</i>
<i>Wanneer er weinig werk te doen is, zie ik dit als een kans om een nieuw project te starten.</i>
<b>Verminderen van belemmerende functie-eisen ‘Hindering Job Demands’</b>
<i>Ik reguleer mijn werk op zo 'n manier dat ik probeer om contact te minimaliseren met mensen wiens problemen mij emotioneel raken.</i>
<i>Ik zorg ervoor dat mijn werk mentaal gezien minder intens is.</i>

5. Ik ga nu door met de vier dimensies die ik net benoemd heb, en stel hierbij specifieke vragen per dimensie.

#### **Toenemen van sociale middelen**

- Kunt u nader ingaan op de mogelijkheid om deze dimensie in uw functie in praktijk te brengen?
- Wat zijn volgens u bevorderende factoren voor het toenemen van uw sociale middelen in uw werkcontext?
- Wat zijn volgens u de belemmeringen voor het toenemen van uw sociale middelen in uw werkcontext?
- Welke impact denkt u dat COVID-19 heeft gehad op het toenemen van uw sociale middelen in uw werkcontext?

#### **Toenemen structurele middelen**

- Kunt u nader ingaan op de mogelijkheid om deze dimensie in uw functie in praktijk te brengen?
- Wat zijn volgens u bevorderende factoren voor het toenemen van uw structurele middelen in uw werkcontext?
- Wat zijn volgens u de belemmeringen voor het toenemen van uw structurele middelen in uw werkcontext?
- Welke impact denkt u dat COVID-19 heeft gehad op het toenemen van uw structurele middelen in uw werkcontext?

#### **Toenemen van uitdagende functie-eisen**

- Kunt u nader ingaan op de mogelijkheid om deze dimensie in uw functie in praktijk te brengen?
- Wat zijn volgens u bevorderende factoren voor het toenemen van uw uitdagende functie-eisen in uw werkcontext?

- Wat zijn volgens u de belemmeringen voor het toenemen van uw uitdagende functie-eisen in uw werkcontext?

- Welke impact denkt u dat COVID-19 heeft gehad op het toenemen van uitdagende functie-eisen in uw werkcontext?

### **Verminderen van hinderlijke functie-eisen**

- Kunt u nader ingaan op de mogelijkheid om deze dimensie in uw functie in praktijk te brengen?

- Wat zijn volgens u bevorderende factoren voor het verminderen van uw hinderlijke functie-eisen in uw werkcontext?

- Wat zijn volgens u de belemmeringen voor het verminderen van uw hinderlijke functie-eisen in uw werkcontext?

- Welke impact denkt u dat COVID-19 heeft gehad op het verminderen van uw hinderlijke functie-eisen in uw werkcontext?

6. Kunt u voorbeelden noemen van job crafting die u of iemand anders in uw werkomgeving heeft toegepast en die volgens u doeltreffend of succesvol waren?

Uzelf:

- Wat deed u in deze situatie?
- Wat was de reden achter dit job crafting gedrag?
- Welk gevoel riep het job crafting gedrag bij u op?
- Wat is/waren de uitkomst(en) van job crafting in deze situatie?

Andere persoon:

- Wat deed deze persoon in deze situatie?
- Wat was de reden achter dit job crafting gedrag?
- Welk gevoel riep het job crafting gedrag bij hen op?
- Wat is/waren de uitkomst(en) van job crafting in deze situatie?

7. Kunt u voorbeelden benoemen waarin job crafting werd geprobeerd door u of door iemand anders in uw werkomgeving waarvan u dacht dat deze ineffectief of niet succesvol waren?

Uzelf:

- Wat deed u in deze situatie?
- Wat was de reden achter dit job crafting gedrag?
- Welk gevoel riep het job crafting gedrag bij u op?
- Wat is/waren de uitkomst(en) van job crafting in deze situatie?

Andere persoon:

- Wat deed deze persoon in deze situatie?
- Wat was de reden achter dit job crafting gedrag?
- Welk gevoel riep het job crafting gedrag bij hen op?
- Wat is/waren de uitkomst(en) van job crafting in deze situatie?

Bij onderzoek naar een specifieke actor in job crafting gedrag, blijkt de rol van het management gerelateerd te zijn. Managementondersteuning kan worden gezien als de mate waarin managers de bijdragen van werknemers waarderen en zorg dragen voor hun welzijn, door blijf te geven van consideratie, acceptatie en zorg voor de behoeften en gevoelens van andere werknemers.

8. Hoe zou u de steun die u van het management krijgt het best omschrijven?

- Op welke manier ervaart u dat dit u helpt betrokken te zijn bij het vergroten van uw sociale hulpbronnen?
- Op welke manier ervaart u dat dit u helpt betrokken te zijn bij het vergroten van uw structurele hulpbronnen?
- Op welke manier ervaart u dat dit u helpt betrokken te zijn bij het verhogen van uw uitdagende functie-eisen?
- Op welke manier ervaart u dat dit u helpt betrokken te zijn bij het verminderen van uw belemmerende functie-eisen?

## Appendix D – Consent form

### INFORMATIE EN TOESTEMMINGSFORMULIER

U bent uitgenodigd om deel te nemen aan een onderzoeksproject waarin werkgedrag van verpleegkundigen in een ziekenhuisomgeving wordt onderzocht. Dit onderzoeksproject wordt uitgevoerd door Rawan Ghazzawi en Sanne Gebben op het Instituut voor Management Onderzoek van de Radboud Universiteit.

De procedure omvat het worden geïnterviewd. De vragen gaan over werkgedrag van verpleegkundigen in een ziekenhuisomgeving. Het interview duurt ongeveer 30-40 minuten. Dit interview wordt audiomatig opgenomen. Uw contactgegevens zullen niet worden verzameld.

#### **Vertrouwelijkheid van de onderzoeksgegevens**

De onderzoeksgegevens worden geanonimiseerd of onder een pseudoniem vastgelegd en veilig worden opgeslagen volgens de richtlijnen voor het beheer van onderzoeksgegevens van de Radboud Universiteit en conform de Algemene Verordening Gegevensbescherming (AVG). De verzamelde gegevens blijven vertrouwelijk en anoniem en de antwoorden die u geeft, zullen op geen enkele manier aan u gekoppeld kunnen worden. Persoonlijke gegevens worden zo snel mogelijk verwijderd. De onderzoekers die betrokken zijn bij dit onderzoek zullen de onderzoeksgegevens gebruiken voor academische publicaties en presentaties. De gegevens worden niet gebruikt voor andere onderzoeken, tenzij wij hiervoor uw uitdrukkelijke toestemming hebben gekregen. In het kader van de onderzoeksintegriteit zullen de onderzoeksgegevens voor een periode van ten minste 10 jaar toegankelijk zijn voor de academische gemeenschap.

#### **Vrijwillige deelname**

Uw deelname aan dit onderzoek is vrijwillig. Dit betekent dat u uw deelname en toestemming op elk moment tijdens de periode van het verzamelen van gegevens kunt stopzetten en intrekken, zonder opgave van reden. Tot zes weken na deelname kunt u uw onderzoeksgegevens laten verwijderen door een verzoek te sturen naar [rawan.ghazzawi@ru.nl](mailto:rawan.ghazzawi@ru.nl) of [sanne.gebben@hotmail.com](mailto:sanne.gebben@hotmail.com).

#### **Vergoeding**

Wij willen u alvast hartelijk danken voor uw deelname aan dit onderzoek. Uw deelname helpt om de kennis over werkgedrag van verpleegkundigen in ziekenhuisomgevingen te verbeteren. U ontvangt geen vergoeding voor deelname aan dit onderzoek.

#### **Meer informatie**

Indien u meer informatie wenst over dit onderzoek, nu of in de toekomst, neem dan contact op met: Rawan Ghazzawi (e-mail: [rawan.ghazzawi@ru.nl](mailto:rawan.ghazzawi@ru.nl)); adres: Elinor Ostrom Building, room 03.611), of Sanne Gebben (e-mail: [sanne.gebben@hotmail.com](mailto:sanne.gebben@hotmail.com); telefoon: 0652135750).

Indien u klachten heeft over dit onderzoek, neem dan contact op met:

- de onderzoeker, of
- de vertrouwenspersonen voor academische integriteit via e-mail: [vertrouwenspersonen@ru.nl](mailto:vertrouwenspersonen@ru.nl), of
- de Commissie Wetenschappelijke Integriteit van de Radboud Universiteit. De secretaris van de commissie is Mr. M. Steenbergen, ([m.steenbergen@bjz.ru.nl](mailto:m.steenbergen@bjz.ru.nl) of 024 3611578) Bestuurlijke & Juridische Zaken.

Meer informatie over de Commissie Wetenschappelijke Integriteit vindt u hier:

<https://www.ru.nl/over-ons/overradboud/integriteitsbeleid/wetenschappelijke-integriteit/>

TOESTEMMING: Selecteer hieronder uw keuze. Als u hieronder “akkoord” selecteert, betekent dit dat:

- U kennis heeft genomen van deze informatie en deze begrijpt;
- U vrijwillig instemt met deelname;
- U ten minste 18 jaar oud bent.

Indien u niet wenst deel te nemen aan dit onderzoek, gelieve deelname te weigeren door “Ik ga niet akkoord” te selecteren.

**Gaat u akkoord met deelname?**

Ik ga akkoord

Ik ga niet akkoord

**Gaat u akkoord met het opnemen van het interview?**

Ik ga akkoord

Ik ga niet akkoord

Handtekening deelnemer:

Datum:

## Appendix E – Code book

Code	Definition	Exemplary quotes
Take initiative	Take action of their own accord.	“So I really like being able to look further and to think along and, um, for example, to be able to see certain lab values and to think for myself what it could be and what action could follow (...).”
Accessible contact	When people are approachable	“Then there has to be the space and the communication from old colleagues as well that you dare to ask so to speak, so everyone has to be open to that.
Avoid tasks based on weaknesses	Shying away from assignments and duties that the nurse finds difficult.	
Dependent on colleagues	Leaning on colleagues for the performance of tasks.	“So basically everything that has to do with that I am dependent on my colleague, so indeed I am constantly waiting for my colleague to have time to go and do that for me.”
Development to become independent	Growth of the skills and abilities of the nurse to no longer be dependent on colleagues.	“Ehm, yes, actually more in-depth in cardiology, because it is about the cardiac arrhythmia what I said, that I soon can do all that myself.”
Employees seek for feedback	Nurses attempting to obtain an evaluation about their performance in their job.	“So then I do ask like ‘do you have any feedback for me?’.”
Encourage development	Support the process of improving skills and abilities of the nurses.	“No, she’s definitely, um, she supports if you want to broaden yourself or deepen yourself and things like that, so she just encourages that.”
Exchange of resources between team members	The sharing of skills, knowledge or assets between nurses who work together.	“Zodat je niet alleen zelf daarmee bezig bent om dat uit te zoeken, maar dat je die kennis ook weer kunt overbrengen op je collega’s.”
Goal-setting environment	An organizational environment in which the employees are oriented to and motivated by performance goals.	“Which actually started with us, as a team not really having a goal, so it then started with that actually every week would have a weekly goal, and this was then one of those goals, to better indicate: how busy is everyone?”
Heavy workload	When the nurse has a high number of responsibilities and has to push the	“I think also a bit because of the workload, so that during your shift you're just so focused on the work you have to complete, um, that in

	boundaries of what realistically can be done in the given time.	addition to that there's not much room to offer yourself to start a project.”
High level of discretion	When the job design provides the freedom to decide what should be done in a particular situation.	“Um, I think it helps a lot that we have freedom to do things in a different way, when you can properly justify why you’re doing it in a different way.”
High nurse-to-patient ratio	An indication of how many patients one nurse provides care for at a time, which is perceived as high if the amount of patients is more than five.	“Yes, we kind of, we work with room assignment, so, um, the nurse has his own six to eight patients.”
Independency	A state in which a person has autonomy and freedom in acting and is not influenced or controlled by others.	“Then that is some tidying up, some replenishing, uhm, getting things ready uhm, preparing medications, uhm you all do independently.”
Insufficient staffing	A situation in which the staffing of nurses is inadequate for the amount of tasks which need to be performed.	“Someone has to take over my function at that moment. And that is difficult, you can't say 'yes you walk yourself to the surgery, because I can't walk with you!'.”
Involvement with nurses	When the management is concerned with the nurses.	“Ehm, I think it is important that he or she is approachable and involved with the team and indeed listens to what the team wants, what they need and then gets to work on it sincerely and also gives feedback.”
Issues between colleagues	Nurses who have conflicts with each other or irritation between colleagues.	“Maybe also, um, if in a team there is a lot of gossiping about other colleagues.”
Job autonomy	The degree to which the job provides freedom, independence and discretion to the individual in performing tasks.	“Um, and then you have your other tasks, that’s where you’re actually free to do anything.”
Judged by asking questions	A situation in which asking questions by a nurse is negatively talked about or negatively seen by a colleague.	“Yes, of course, you always have colleagues among them who, um, who you know, or who you know, don not, but who you notice are, um, not very appreciative when you ask something.”
Lack of experience or skills	When the nurse perceives a shortage of abilities or expertise in their job.	“(…) so if, for example, I don’t know things because I’m a general nurse and I’ve only been working there for, well, two months, you don’t have all the experience of that department that I had, for example, in neuro, where I worked for 2.5 years.”

Lack of recognition in the nursing profession	Nurses who perceive too little appreciation of their work in the nursing profession.	“If you've learned something new or done a course, you want to get the recognition for it too so to speak.”
Lack of reward	Nurses perceiving too little benefits for their work or development.	“And beyond that you do not see anything of it. You just keep earning the same, so to speak.”
Managerial support	Mental or physical assistance of supervisors or higher levels of management	“The supervisor was open to feedback, wanted to create the best possible working atmosphere for us, so that we could indeed be the best we could be.”
No function differentiation	When there is no difference between nurses who are HBO-educated and a nurses who are MBO-educated in tasks and reward.	“Now it is in the hospital, a MBO nurse earns as much as a HBO nurse, even though you did a completely different study.”
Perceived lack of openness to discuss ideas and/or needs	When nurses perceive too little space to express their suggestions and what they need in their job with management.	“Our first supervisor did everything in her own way and there was actually very little room for yourself or colleagues to get involved, to change anything or to indicate what you would like.”
Perceived lack of resources to provide development	When the nurse experience that management has too little assets to offer opportunities for education.	“They want to give a lot of freedom, but they do not always have the ability or the budget, or the space.”
Perceived lack of support from management	When the nurse misses assistance of the management.	“In terms of management, I also think the biggest barrier is that they never, it always goes through the department head, so I wouldn't even know who management is actually.”
Perceived lack of trust from the employer	When the nurse experiences that the employer does not rely on him or her.	“As if I had to continually prove what I could do, instead of leading from confidence.”
Pressure to perform	An internal drive of the individual nurse to perform well in his or her job.	“If I notice that someone else can do something better than I can, then that is just a little bit more motivation for me to just be able to do it well too.”
Protocols	A document with official procedures to execute certain tasks.	“There are things that must be done according to protocol in a certain way (...).”
Providing growth opportunities	When the management offers time, courses or other resources to nurses to develop themselves.	“(…), but it is also really nice when certain things are offered, um, from the hospital being.”

Self-belief in capabilities	Trust in their own abilities and skills.	“Um, well, I think in terms of skills not so much. Indeed also, because you've had all that during your studies and also, um, interview techniques and also how to approach certain things.”
Self efficacy	The beliefs that people have in their own abilities and capabilities to execute desired behaviors and impact their environment successfully.	-
Seek information	Searching for facts about a person, object or situation.	“I really like to develop myself and then I look up literature, for example, and I find out that what we are doing is actually very old-fashioned.”
Seek opportunities	Searching for a situation that makes it possible to bring change.	“Unless you're like, for yourself, 'okay it may not be a problem yet, but it could arise,' then you can already work on it.”
Support from colleagues	Mental or physical assistance of colleagues.	“Yes, you often consult with colleagues when you do not know the situation or it becomes more complex.”
Task interdependence	When the performance of a task is dependent on actions and tasks performed by colleagues.	“In our department, things are a bit different because we also have heart rhythm monitoring and I'm not allowed to do that yet. So basically everything that has to do with that I am dependent on my colleague, so I am indeed constantly waiting for my colleague to have time to do that for me.”
Time for personal development	When the management provides time for nurses to work on their skills and abilities.	“What could be a positive point to that is that healthcare just gives every employee, say, 1 day a month of hours that you can just work on things.”
Trust	The confidence that the nurse has in his or her colleagues to ask or tell them things.	“If you, um, if I don't have the confidence in my colleague to tell that, to just let me see it up close, ehm, and then I think of 'yes, I'll solve it myself', (...).”
0-5 years of experience	The years that the nurse works in the nursing profession is between zero to five.	“So I started the traineeship in September and now since a few weeks I am in the flex.”