博士学位論文

# Job Crafting and Its Relationships with Job's Social Characteristics and Meaningful Work: Exploring Big Five Personalities as Moderators

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との関係：モデレーターとしてのビッグファイブ・パーソナリティ
の探求

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# ABSTRACT

This dissertation explores job crafting, which refers to the physical and cognitive changes that individuals make in their task or relational boundaries (Wrzesniewski & Dutton, 2001) in order to fulfill personal human being needs, including the need for autonomy, the need for relatedness, and the need for positive self-image. Previous job crafting literature has remained relatively silent about how social work context shaping employees' crafting behaviors, how individual job crafting behaviors influencing employees' perception of work meaningfulness, and how individuals differences moderating these relationships. Thus, the research conducted in this dissertation addresses two primary questions: (1) *how social characteristics predict task, relational, and cognitive crafting behaviors? And how do individual personalities influence the above relationships?* (2) *How extensive and reductive job crafting behaviors trigger meaningful work? And how Big Five personalities moderate the relationships?* In the present dissertation, a model of antecedents and consequences of job crafting and the moderating role of individual differences is proposed to investigate how the relational context shapes workers' engagement of job crafting behaviors and how they perceive work meaningfulness through job crafting. The present model firstly explores the predicting effects of social support, interdependence, interaction outside the organization, and feedback from others, as well as their interactions with Big Five personalities on task, relational, and cognitive crafting. Further, meaningful work as an outcome of extensive and reductive crafting behaviors, as well as the moderating role of personalities, is addressed.

The dissertation starts from a general introduction – Chapter 1, which provides the research background, a brief introduction of job crafting, the statement of the importance of social context, individual differences, and meaningful work, and the outline of the dissertation. In chapter 2, the previous literature on job crafting is reviewed. After summarizing the proven antecedents, outcomes, and moderators of job crafting, the limitations of the current literature are proposed. Further, the detailed research questions, which will be addressed in the empirical chapters, are put forward based on the limitations. Theoretical supports, such as the theory of purposeful work behavior, are provided in the final section.

Chapter 3 and Chapter 4 are empirical studies. First, the study in chapter 3 preliminarily

investigates the effect of the social work environment and the moderating role of neuroticism on employees' crafting behaviors. The findings suggest that all four social characteristics (i.e., social support, interdependence, interaction outside the organization, and feedback from others) have a significant impact on specialized crafting dimensions. Moreover, social characteristics have the most effective prediction on relational crafting. The neuroticism personality is a valid moderator. Second, chapter 4 explores how individual extensive and reductive crafting behaviors affect meaningful work and the interaction effects Big Five personalities. The results provide empirical evidence that meaningful work is an outcome of extensive and reductive job crafting, and the moderating role of agreeableness personality and openness to experience personality is proved as well.

In the final chapter, a general discussion is stated. First, a summary of the main findings in empirical chapters is provided. Then the theoretical contributions and practical implications are discussed. The limitations and recommendations for future research are proposed in the end.

To my father and mother, you sacrifice a lot in my growing up. I am much grateful for your steadfast love and encouragement.

x

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# CHAPTER 1 General Introduction

## 1.1 Research background

Due to the global transformation from manufacturing economies to service and knowledge economies, the nature of work has been changed dramatically (Grant & Parker, 2009). In such situations, managers are difficult to design formalized job descriptions to improve effectiveness (Griffin, Neal, & Parker, 2007), and organizations need to change tasks, roles, and jobs over time to address emergent economic demands and opportunities (Ilgen & Hollenbeck, 1991). To keep pace with these rapid and essential alterations in information and telecommunication technology, organizations have started various new work methods, including global work, virtual work, telework, and self-managing teams. Moreover, employees are encouraged to introduce new work methods to increase work effectiveness and efficiency, or to expand their work scope and responsibilities (Wang, Demerouti, & Bakker, 2017). It has been well recognized by managers and leaders that employees should be relied heavily on to cope with the increased interdependence, uncertainty, complexity, and flexibility in the economy shift.

At the same time, employees' expectations for work are rising (Rousseau, Ho, & Greenberg, 2006). In the modern workplace, the temporal, physical, and administrative attachments between organizations and workers have been weakened, and job mobility has expanded dramatically. For employees, organizations are regarded as sites for utilizing personal experts and skills instead of communities of lifelong employment (Grant & Parker, 2009). Workers have recognized that they have the necessity to change tasks and organizations on a regular basis, and thus, they expect that their work can fit their individual preferences, motives, values, and capabilities (Rousseau et al., 2006). Therefore, organizations and managers have found the importance of designing flexible jobs and roles to retain talents.

Recognizing the importance of employees' proactivity and self-initiatives, organizational scholars have introduced the concept of job crafting. Job crafting refers to the physical and cognitive alterations employees make in their task or relational work boundaries (Wrzesniewski & Dutton, 2001). Employees' crafting behaviors are a bottom-up job redesign process, and

individuals can take such initiative actions to shape, mold, and redefine their jobs. As organizations make changes more quickly than before, employees need to understand better about their work roles and responsibilities in order to make contributions to achieving organizational goals (Ghitulescu, 2013). According to Wrzesniewski and Dutton (2001), employees' ability to craft work content and job meaning assists organizations in coping with such ongoing economic changes. Such crafting abilities tend to be a strategic advantage to make organizational adjustments.

Organizations and management also recognize that it is important to encourage and promote job crafting approaches initiated by employees (bottom-up approach) because the self-initiated approaches can predict many positive work outcomes, such as job satisfaction, job performance, work engagement, organizational commitment, and well-being (e.g. Bakker, Tims, & Derks, 2012; Ghitulescu, 2007; Leana, Appelbaum, & Shevchuk, 2009; Tims, Bakker, & Derks, 2012, 2013, 2015). Organizations should create a supportive environment for benefitting from employees' crafting behaviors.

The concept of job crafting motivates researchers to investigate the influences from the work, employees, and the work context and to explore its subsequent workplace work outcomes. In the previous literature, researchers have mainly focused on the impact of task characteristics and individual attributes on job crafting. Scholars also have investigated various contextual factors as predictors of employees' crafting behaviors. With regard to outcomes of job crafting, most empirical studies explored individual behaviors and individual psychological outcomes.

The present chapter will firstly discuss the job crafting phenomenon, including concepts, motivations, forms, and alternative job crafting conceptualizations. Second, I will argue that the importance of employees' social context, individual differences, as well as meaningful work. Third, after stating the research objectives and research questions, I will outline the structure of the dissertation.

## 1.2 Job crafting

Individuals work not only for welfare benefits, but also for fulfilling psychological needs, such as autonomy, competence, and relatedness (Ryan & Deci, 2000). Rather than being passive

recipients of the work context, employees are initiative to make changes to shape individual work experiences. When the job cannot meet employees' psychological needs, workers are likely to change their work tasks and characteristics, which are referred to as job crafting behaviors. Wrzesniewski and Dutton (2001) coined the term "job crafting" to describe the self-started boundary changes workers make in their work tasks and relations.

Job crafting is defined as "the physical and cognitive changes individuals make in the task or relational boundaries of their work" (Wrzesniewski & Dutton, 2001). They presented three forms of job crafting, including task crafting, relational crafting, and cognitive crafting. The first form entails changing task boundaries, which refers to alterations of the number, scope, or type of job tasks. Employees can choose to do fewer, more, or different tasks than just prescribed in the formal job description. The second form of job crafting involves changing the relational boundaries of the job. Workers can alter the quality, frequency or amount of interactions with others. For instance, workers may increase opportunities to develop new clients or avoid interactions with the people they do not like. The third form of job crafting is changing the cognitive boundaries of the job. Cognitive crafting includes a cognitive process of task redefinition without actually changing the job. One type of cognitive crafting introduced by Wrzesniewski and Dutton is that employees can alter how they parse the job – viewing it as a set of separated work tasks or as an integrated whole. For example, academic researchers may regard their work as a process of teaching and writing, but they can also view their job as making an essential contribution to the scientific community and society as a whole (Wang et al., 2017a).

Wrzesniewski and Dutton (2001) suggested that job crafting activities are rooted in three basic motivations: the desire for control and meaning, a need for positive self-image, and a need for connection with others. These three psychological human being needs are more likely to promote employees' job crafting behaviors when individuals perceive the opportunities for crafting, which appear to be more common with high autonomy or low task interdependence in the job (Wrzesniewski & Dutton, 2001). Besides, they proposed that workers would take different job crafting strategies due to their different intrinsic or extrinsic motivational orientations as well as their work orientations, including job orientation, career orientation, and calling orientation. Through job crafting, employees are likely to experience different work

meanings and work identities.

The nature of job crafting does not necessarily to be positive or negative (Wrzesniewski & Dutton, 2001). It may lead to beneficial organizational outcomes, and it can also have detrimental effects (Demerouti, Bakker, & Halbesleben, 2015). The degree to which job crafting behaviors contribute to organizations seems to rely on their alignment with organizational objectives (Wrzesniewski & Dutton, 2001). However, existing studies have shown that individual job crafting behaviors tend to lead to positive outcomes, such as job performance, job satisfaction, organizational effectiveness, work engagement, work commitment, and so on.

## 1.3 The importance of employees' social context

In the current literature, scholars have investigated various predictors of job crafting. Most job crafting antecedents are individual factors and contextual factors. First, researchers have provided empirical evidence on the predicting effects of individual differences (e.g., proactive personality, Big Five personality, regular focus, approach and avoidance temperament, individual initiatives, orientations, and other personal attributes) and individual motivational characteristics (e.g., efficacy, engagement, embeddedness, commitment, identification, job satisfaction, various psychological states, and so on). Second, empirical research also has addressed the influence of contextual factors on job crafting, including job characteristics, social factors, and collective context. Although the importance of social factors is emphasized (Grant & Parker, 2009), relative empirical studies are limited.

Except for the proactive perspective, scholars have highlighted another emerging viewpoint in work design: relational perspective, which accentuates the role of interpersonal interactions and interdependencies in work. Organizational researchers have recognized that work is inextricably intertwined with interpersonal interactions and relationships (Grant & Parker, 2009). Such a research highlight occurs due to the following reasons. First, the nature of work has changed. The global business society has transformed from a manufacturing economy to a knowledge and service economy. Such a global shift means that organizations must manage the increased interdependence and uncertainty of the work context (Scott & Davis,

2007).

Second, employees' internal work relationships are more pervasive and vital. Managers use teams and groups to achieve organizational goals, and employees need to carry out tasks and responsibilities interdependently (Griffin et al., 2007). Moreover, groups and teams need to collaborate beyond their boundaries, coordinating with individuals and teams from various departments, fields, and industries.

Third, workers' external relationships are more important and widespread than ever before. As the service sector grows dramatically, employees have the duty to fulfill the expectations of customers, clients, partners, end-users, patients, and recipients (Grant & Parker, 2009). The excellent ability to meet the needs of customers and clients can determine the success and survival of an organization.

Finally, frequent technological and strategic changes require organizations to adjust their social structures. Nowadays, corporations always need to encounter mergers and acquisitions, and the introduction of matrix and network organizations is common. Employees need professional interpersonal skills in cross-functional teams (Grant & Parker, 2009). However, the empirical exploration for the predicting effects of social context on job crafting is limited. Therefore, in line with the above trends, the present thesis will emphasize the significant influence of social work characteristics on employees' initiative behaviors by designing an empirical study.

**1.4 Individual differences matter**

Although researchers have highlighted the importance of employees' social environment, the effects of individual attributes should not be ignored. Employees can vary in their propensity to be proactive, and their personal dispositions can shape how they engage in job crafting behaviors. Moreover, by definition, job crafting is self-initiated and is not necessarily linked to formal performance appraisals (Wrzesniewski & Dutton, 2001). Thus, employees' crafting behaviors are very likely to be shaped by their personal propensity, values, and beliefs.

Drawing on the individual difference perspective, empirical studies have examined the effects of dispositional factors on job crafting. However, recently, researchers have highlighted

the importance of the interaction effect of contextual factors and individual differences on employees' initiative behaviors (Wu & Li, 2016). Therefore, the current dissertation will apply the Big Five personalities as moderators when investigating the relationships between social characteristics and job crafting as well as the associations between job crafting and meaningful work.

**1.5 Job crafting and meaningful work**

Job crafting can alter work meanings by changing tasks and relationships in ways that allow employees to reframe their work purpose and to shape different work experiences (Wrzesniewski & Dutton, 2001). The meaning of work and the meaningfulness of work are different. According to Rosso, Dekas, and Wrzesniewski (2010), the meaning of work refers to what it is that the work signifies or represents, while the meaningfulness of work means how much purpose or significance the work has. Research on job crafting involves changes in both types. According to Wrzesniewski, LoBuglio, Dutton, and Berg (2013), the meaning of work is at the core of employees' work experience. Work meanings play a role of lenses through which workers can understand and respond to their work (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997).

Meaningful work is vital for both individuals and organizations. First, extensive research has indicated that individuals who have a strong sense of meaning and purpose experience fewer psychological problems and greater happiness (Steger, Frazier, Oishi, & Kaler, 2006; Steger, Kashdan, Sullivan, & Lorentz, 2008; Steger, Kawabata, Shimai, & Otake, 2008). People who perceive more meaningfulness report greater well-being (Arnold, Turner, Barling, Kelloway, & McKee, 2007), less harmful workaholism, less work-life conflict, and better work adjustment (Bonebright, Clay, & Ankenmann, 2000). Second, according to Steger and Dik (2010), the benefits of meaningful work at the individual level have the tendency to translate to organizational benefits at the organizational level. They predicted that meaningful work could lead to increased morale, lower turnover, greater productivity, increased organizational citizenship behavior, and higher performance.

Job crafting and work meanings are intimately linked with each other. According to

Wrzesniewski and Dutton (2001), any actions or changes that employees take to increase feelings of purpose are likely to change work meanings. When employees introduce the task and relational boundary changes, their work experiences and their understandings of work meanings alter. First, job crafting, which allows for more expression of personal values, motivations, or beliefs, is likely to have a direct influence on the positive work meanings because it creates a sense of alignment between the self and the work (Wrzesniewski et al., 2013). Second, the source of work meanings involves other people, including coworkers, managers, customers, clients, communities, and so on (Rosso et al., 2010). By reshaping work connections, adjusting actual interactions, or changing how to think about the relatedness with others, the meaning of work is likely to change.

Three empirical studies have explored meaningful work as a beneficial work outcome of JD-R job crafting. However, the associations between task, relational, cognitive crafting, and meaningful work are not clear. Therefore, in chapter 4, I designed an empirical study to investigate the above unclear relationships. Moreover, as the self is a critical source of work meaning, the moderating role of Big Five personality traits on the relationships between job craftings and meaningful work is also included.

**1.6 Outline of the dissertation**

The next chapter (Chapter 2) introduces a review of the current job crafting literature. Different perspectives on job crafting and measurements are described. After reviewing the antecedents and outcomes of job crafting as well as moderators in job crafting research, I propose the limitations of the previous empirical studies and put forward research questions. In the last section of Chapter 2, theories for the hypothesized model are introduced.

Chapter 3 involves an empirical study, which addresses the predictive effects of social characteristics on task, relational, and cognitive crafting. Moreover, it emphasizes the importance of the moderating role of one individual personality - neuroticism. The empirical study in Chapter 4 explores the associations between extensive and reductive job crafting and meaningful work; it also includes conscientiousness, agreeableness, and openness to experience as moderators. Both empirical chapters outline the rationales, methodology, data collection

procedures, and measures. Also, the analysis of the hypotheses tests and discussions are presented in the last section, respectively.

Chapter 5 is a general discussion for the whole dissertation. In the chapter, the main purpose of the dissertation is reviewed, and the main findings are summarized. I also outline the theoretical contributions and practical implications of the whole study. Finally, limitations for the current thesis and recommendations for future research are discussed.

# CHAPTER 2 Literature Review

## 2.1 Introduction

In the last nearly two decades, organizational scholars have conducted plenty of studies to explore the predictors of job crafting as well as its potential results. In this chapter, I will review the job crafting literature since 2001, consider the limitations of the existing literature, and identity the potential research gaps that require further investigations. In particular, the present chapter will discuss the concept of job crafting firstly, including different perspectives and levels of job crafting, measurements, antecedents, outcomes, and moderators of job crafting. Second, based on the literature review, I will argue the potential limitations of the current literature. Specifically, The current job crafting literature mainly focused on the outcomes of job crafting. I contend that the predicting role of social context and the moderating role of Big Five personalities should gain more attention and exploration. Continuously, research questions will be proposed according to the importance of social climate and the present research gaps. Finally, to understand the importance of the moderating effects of Big Five personalities, some theories that provide theoretical foundations will be discussed in the last section.

## 2.2 Overview of the literature

To start the literature review of job crafting, suitable empirical studies and meta-analysis papers were selected. After the selection, the job crafting literature was analyzed. Then the limitations of the current literature were proposed. With the analyzed limitations, I put forward my research questions.

### 2.2.1 Literature selection procedure

I used a structured selection procedure for selecting empirical papers about job crafting. The first step was to start the search via Web of Science (webofknowledge.com). To focus on the topic of job crafting, the titles of the article must contain the following keywords: job crafting, crafting the job. Second, the searched articles were sorted by date, so the earliest published paper were on top. As Wrzesniewski and Dutton proposed the initial

conceptualization of job crafting in 2001, the publication years of the literature were set from 2001 to 2019. Third, the paper list with author, title, source, and abstract was downloaded and exported. To confirm whether the article was an empirical study of job crafting, I read the abstract of each paper in the list. If the article did not focus on job crafting or it was not empirical research, the article would be removed from the list. Finally, to obtain a relatively comprehensive literature list of job crafting, I also collected all the meta-analysis papers with the topic of job crafting up to October 2019. After filtering their reference lists, some empirical studies on job crafting were replenished in the paper list derived from Web of Science.

### 2.2.2 Different perspectives of job crafting

In the current literature, two types of conceptualizations of job crafting are widely accepted and applied (Zhang & Parker, 2019). Recently, some scholars have endeavored to synthesize these two perspectives. In the following sections, I will discuss the main characteristics of these two dominant job crafting perspectives and introduce some attempts in which scholars are tend to integrate these two perspectives.

*The original conceptualization of job crafting*

The initial proposal of the term *job crafting* was derived from Wrzesniewski and Dutton (2001). They defined job crafting as "the physical and cognitive changes individuals make in the task or relational boundaries of their work" (p. 179). From this perspective, employees engage in task crafting, relational crafting, and cognitive crafting behaviors in order to adjust personal work identities and enhance work meanings. Task crafting refers to work changes of the task boundaries by changing the number, scope, quality, or type of job tasks at work. Relational crafting involves work changes in the relational aspects (scope, quality, or quantity of interactions with others). Cognitive crafting means to change how an employee views or frames his/her job.

The strength of this original perspective is that it describes three main types of job crafting behaviors. After the first proposition of job crafting, scholars have shown great interest in such a bottom-up work design method, and research on job crafting had increased sharply. However, empirical studies based on this perspective accounted for a relatively small percentage because

of the difficulties in understanding and measuring relational crafting and cognitive crafting.

### *Extensive and reductive job crafting*

Wrzesniewski and Dutton (2001) also argued that employees changed their work tasks or relationships by qualitatively or quantitatively extending or reducing task execution or work relationships. Based on this argument, later scholars proposed job crafting measurements by emphasizing the extensive and reductive changes of job crafting. For example, Weseler and Niessen (2016) developed a job crafting scale, which distinguished between the extension and reduction of task and relational boundaries. In this job crafting scale, five sub-dimensions of job crafting were measured, including extended task crafting, reduced task crafting, extended relationship crafting, reduced relationship crafting, and cognitive crafting. Besides, scholars have classified approach and avoidance orientated job crafting (e.g., Bruning & Campion, 2018; Zhang & Parker, 2019).

### *Job crafting based on job demands-resources (JD-R) model*

The second dominant perspective of job crafting came from the job demands-resources theory. According to JD-R theory (Bakker & Demerouti, 2017), job characteristics are classified as either job demands or job resources. Job demands are defined as the sustained physical and/or psychological (cognitive and emotional) efforts that are required by physical, psychological, social, or organizational job aspects. Generally, job demands are associated with negative health outcomes. Examples of job demands include high work pressures and high emotional demands during work. Job resources refer to job aspects (e.g., physical, psychological, social, or organizational aspects) that can function in achieving work goals, reducing job demands or costs, or stimulating individual growth, learning, and development. Examples are autonomy, feedback, and skill variety (Bakker & Demerouti, 2017).

Tims et al. (2012) conceptualized job crafting based on job demands-resources (JD-R) theory as "the changes that employees may make to balance their job demands and job resources with their personal abilities and needs" (p. 174). In particular, they introduced four sub-dimensions of job crafting in this JD-R perspective, including (1) increasing structural job resources (e.g., mobilizing autonomy and developmental opportunities), (2) increasing social job resources (e.g., mobilizing social support and feedback), (3) increasing challenging job

demands (e.g., taking on new projects), and (4) decreasing hindering job demands (e.g., avoiding emotionally straining demands).

The job crafting perspective based on the JD-R model also has its strengths, According to this job crafting perspective (JD-R), some self-initiated behaviors can be easily sorted and explained, for example, self-initiated skill development and challenging searching. Moreover, when considering the implications for occupational health outcomes, such as stress, strain, burnout and illness, JD-R job crafting is more suitable because it emphasizes the independent effects of job resources and job demands (Grant, Fried, & Juillerat, 2011). Using the detrimental effects of job demands to explain its prediction on health outcomes is much easier to understand.

However, this perspective has some limitations as well. First, it does not account for the role that the cognitive dimension of job crafting has in shaping work identity (Slemp & Vella-Brodrick, 2013; Slemp, 2017). According to Bakker, Tims, & Derks (2012, p. 1362), "cognitive crafting is more akin to adapting passively to the work situation and less about changing it proactively." Bakker and his colleagues supposed that cognitive crafting behaviors are not real changes that employees make through their behavior. However, I argue that cognitive crafting should be included in job crafting because crafting cognitions about work is an important way to shape work experience (Wrzesniewski & Dutton, 2001). Cognitive crafting is another avenue for employees to influence over their job, and it allows incumbents to appreciate the broad effects of their work and to recognize the value of their job (Slemp & Vella-Brodrick, 2013). Moreover, this is a contradictory view with the JD-R theory. As mentioned above, except physical, social, and organizational job aspects, job demands and job resources also include psychological aspects.

The second potential limitation is that JD-R crafting doesn't involve employees' subjective work experience. The main focus of JD-R job crafting is employees' initiatives on changing the physical resources and demands. How employees to alter their subjective work experience is not clear according to this conceptualization.

### *Integration of different job crafting perspectives*

As both perspectives provide significant insights, recently, job crafting scholars have attempted to find a way to integrate these two perspectives into a full and complete one. Bruning

and Campion (2018) defined job crafting as "the changes to a job that workers make with the intention of improving the job for themselves" (p. 500) and proposed a role-resource approach-avoidance model of job crafting. They classified Wrzesniewski and Dutton's (2001) job crafting perspective as "role-based crafting," which explains how individuals enrich the intrinsic need-supply fit in their work. Tims et al.'s (2012) job crafting approach was developed as "resource-based crafting," which explains how employees manage their work demands and seek work resources. To further distinguish extensive and reductive crafting, they applied approach role crafting, avoidance role crafting, approach resource crafting, and avoidance resource crafting. Zhang and Parker (2019) proposed a hierarchical structure to synthesize different perspectives of job crafting. In their hierarchical job crafting structure, approach- and avoidance- job crafting orientations are at the first level. In the second level, they distinguished different job crafting forms, including behavioral job crafting and cognitive job crafting. The third level distinguished job crafting content, involving job demands and job resources.

Both integrations are meaningful attempts. First, these integration attempts for both perspectives extend our understanding of job crafting and help to unit job crafting concepts under a single umbrella. Second, these integrations can help address some concerns with existing job crafting measures. One issue in the current literature is that different versions of job crafting measurements exist, even within the same theoretical framework (Zhang & Parker, 2019). These integrated job crafting scales can measure job crafting from both perspectives.

However, there are still some limitations. For example, the role-based crafting and the resource-based crafting can overlap under some conditions. Wrzesniewski and Dutton (2001) contended that the purpose of employees' job crafting behavior is to shape their work meanings and identities. Zhang & Parker (2019) applied demands and resources to explain cognitive crafting. Especially, in their model, cognitive crafting includes approach resources cognitive crafting, approach demands cognitive crafting, avoidance resources cognitive crafting, and avoidance demands cognitive crafting. Nevertheless, it is confusing whether cognitive crafting is a kind of job resources or job demands adjustment. In addition, existing integrative efforts are very limited (Bruning & Campion, 2018; Zhang & Parker, 2019). Future research should verify these integrative perspectives of job crafting through empirical studies and longitudinal studies.

### *Job crafting at the team level*

Wrzesniewski and Dutton (2001) described job crafting mainly as an individual-level activity. However, in their conceptualization, job crafting can also include the joint collaborative forms that are team-based. Task boundaries can be drawn around teams as well, and there may be opportunities for teams or groups to revise, alter, and craft task and relational boundaries (see also Leana et al., 2009). However, in the current literature, most studies focus on individual job crafting behaviors. In this dissertation, I will focus on individual job crafting behaviors instead of collective job crafting as well.

### *Job crafting measurements*

Researchers have designed several validated scales to measure job crafting, developed from different perspectives on job crafting. First, based on the original conceptualization of job crafting suggested by Wrzesniewski and Dutton (2001), scholars have developed some scales. For example, Laurence (2010) distinguished physical crafting, relational crafting, and cognitive crafting dimensions in her scale. Good evidence of this job crafting scale has been shown for the criterion-related validity (e.g., C. Q. Lu, Wang, J. J. Lu, Du, & Bakker, 2014). The scale developed by Sekiguchi, Li, and Hosomi (2017), Slemp and Vella-Brodrick (2013), and Niessen, Weseler, and Kostova (2016) also assessed task, relational and cognitive crafting. Except for the original three forms of job crafting, scholars also paid attention to the expansive and reductive features of job crafting. Weseler and Niessen (2016) categorized expansive task crafting, reductive task crafting, expansive relational crafting, reductive relational crafting, and cognitive crafting in their measurement. Besides, Bindl, Unsworth, Gibson, and Stride (2019) designed a job crafting scale, including both enhancing and limiting forms of task, relation, skill, and cognitive crafting behaviors in the workplace. Except for individual level of job crafting, Leana and colleagues (2009) also measured collective job crafting in their scale.

Second, scholars have also designed and verified job crafting scales based on the JD-R perspective (e.g., Tims et al., 2012; Nielsen & Abildgaard, 2012; Petrou, Demerouti, Peeters, Schaufeili, & Hetland, 2012; Lichtenthaler & Fischbach, 2016a, 2016b). For instance, by conducting a series of studies, Tims and colleagues (2012) provided a reliable and valid job crafting scale, which consisted of four dimensions: increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering

job demands. Petrou and colleagues developed another job crafting scale at a daily level. Based on the scale from Tims and colleagues (2012), their study indicated that three forms of JD-R job crafting (including seeking resources, seeking challenges, and reducing demands) varied between and within individual levels.

Finally, to integrate the original conceptualization of job crafting (Wrzesniewski & Dutton, 2001) and JD-R job crafting, recently, several studies have put effort to design scales consisting of items based on both perspectives. For example, Bruning and Campion (2018) conducted two studies and developed a role-resource approach-avoidance taxonomy job crafting, which integrated and extended the dominant role- (original job crafting conceptualization) and resource-based (JD-R job crafting) perspectives. Their job crafting scale measured seven sub-dimensions, including work role expansion, social expansion, work role reduction, work organization, adoption, metacognition, and withdrawal.

## 2.3 Antecedents of job crafting

In the job crafting literature, empirical studies have investigated various antecedents. However, most studies applied job crafting measurements in the Job Demands-Resources perspective. Two meta-analysis papers summarized job crafting literature quantitatively in this perspective (Lichtenthaler & Fischbach, 2019; Rudolph, Katz, Lavigne, & Zacher, 2017). Only Zhang and Parker (2019) and Wang et al. (2017a) reviewed job crafting from both perspectives. The purpose of this review chapter is to category and summarize job crafting empirical studies by synthesizing previous findings from both perspectives.

### *Categories of job crafting antecedents*

Previous literature used relatively simple categories to sort antecedents of job crafting. Rudolph and colleagues (2017) classified job crafting antecedents into three categories: individual differences (including Big Five traits, proactive personality, general self-efficacy, and regulatory focus), job characteristics (involving job autonomy and workload), and demographics (including age, tenure, gender, education, and work hours). Similarly, Wang and

colleagues (2017a) sorted predictors of job crafting into personal attributes (including proactive personality, self-efficacy, and individual temperament), job characteristics (job autonomy and work pressure), and person-job misfit. Applied the model of proactive motivation, Zhang and Parker (2019) defined four different categories of job crafting antecedents: job characteristics, individual differences, motivational characteristics, and social context. However, due to the expansion of job crafting literature, previous classification methods cannot cover the latest job crafting predictors reported by recent job crafting empirical studies.

Therefore, in order to take in the latest job crafting predictors comprehensively, I classified the antecedents of job crafting in five categories, which including (1) individual differences, (2) motivational antecedents, (3) job characteristics, (4) social characteristics, and (5) collective characteristics (See Table 1). The necessity to have the collective characteristics of job crafting predictors is due to the increased volume of relative empirical studies. Recently, job crafting researchers have noticed that not only social factors can influence crafting behaviors, but also the team climate, the organizational environment, the occupational context, and different cultures can influence employees' job craftings. In the following sections, I will introduce the literature review of the five categories of job crafting antecedents in the order as mentioned above.

Table 1 Overview of job crafting antecedents

| Categories of job crafting antecedents | Variables |
|---|---|
| A. Individual differences | (1) Individual needs: the need for positive self-image; (2) individual personalities: proactive personality; Big Five personality; (3) regular focus; (4) approach and avoidance temperament; (5) individual initiatives: personal initiative; personal growth initiative; (6) workaholism; (7) optimism; (8) orientations: calling orientation; boundaryless career orientation; learning goal orientation; (9) positive affect; (10) career competence; job resourcefulness; (11) perceived underemployment; perceived over-qualification; (12) adaptability. |
| B. Motivational characteristics | (1) Efficacy: self-efficacy; creative self-efficacy; self-efficacy for teamwork; (2) engagement: work engagement; vigor; (3) intention to craft resources, challenging demands, and hindering demands; (4) organizational embeddedness; affective commitment; organizational identification; job satisfaction; (5) exhaustion; willing to change; work discretion; public service motivation; (6) psychological factors: psychological safety; psychological capital; psychological empowerment; psychological resilience. |
| C. Job characteristics | (1) Job resources; (2) job demands; quantitative job demands; workload; (3) task characteristics: job autonomy; task identity; task significance; feedback from the job; (4) knowledge characteristics: skill variety; social skill; day-level skill utilization; (5) perceived opportunities: perceived job crafting opportunities; perceived opportunities for professional development; (6) other job characteristics: job enlargement; work pressure; job boredom; burnout; participation in decision making. |
| D. Social factors | (1) Support: social support; autonomy support; perceived organizational support; (2) social ties; (3) task interdependence; (4) contacts' autonomy, significance, and feedback; (5) quality of organizational change communication; quality of communication; (6) perceived customer participation; (7) leadership: perception of empowering/directive/aversive leadership; LMX; Ambidextrous leadership; employee-oriented leadership; servant leadership; leaders' emotional healing; transformational leadership; connecting leadership; paternalistic leadership (authoritarianism, benevolence, and mortality). |

| E. Collective characteristics | (1) Team job crafting; collective job crafting; (2) innovative team climate; (3) team cohesion; (4) human resource practice; human resource flexibility; (5) high impact of organizational change; (6) occupation-level autonomy; (7) occupation difference. |
|---|---|

## 2.3.1 Individual differences

Previous research has investigated the predicting effects of plenty of individual differences on employees' job crafting behaviors. According to my literature review, I summarize the following individual differences which have been explored as job crafting antecedents: individual needs: the need for positive self-image; individual personalities: proactive personality and Big five personalities; regular focus; approach and avoidance temperament; individual initiatives: including personal initiative and personal growth initiative; workaholism; optimism; orientations: including calling orientations, boundaryless career orientations, and learning goal orientations; positive affect; career competence; job resourcefulness; perceived underemployment; perceived over-qualification; and adaptability.

With regard to individual needs, according to Niessen et al. (2016), employees who had a need for positive self-image increased their composite job crafting, relational crafting, and cognitive crafting behaviors. Stable individual personalities, such as proactive personality and Big Five personality, also predict job crafting.

Previous literature enclosed a positive relationship between proactive personality and overall job crafting (Bakker, Tims, & Derks, 2012; Plomp, Tims, Akkermans, Khapova, Jansen, & Bakker, 2016; Zhang, Lu, & Li, 2018; Roudolph, Katz, Lavigne, & Zacher, 2017). Similar positive relationships were also found between proactive personality and four job crafting dimensions based on JD-R perspective (increasing structural job resources, increasing social job resources, increasing challenging job demands, and decreasing hindering job demands) (Tims et al., 2012; Vermooten, Boonzaier, & Kidd, 2019). However, the relationships between proactive personality and task crafting, relational crafting, and cognitive crafting were neglected in previous literature, which worth further exploration.

Regarding the prediction of Big Five personalities, Bell and Njoli (2016) verified the positive relationships between conscientiousness, neuroticism, and overall job crafting in the

JD-R perspective as well as the negative relationships between agreeableness, openness to experience and overall job crafting. There was a non-significant relationship between extraversion and overall job crafting. However, in a meta-analysis, Rudolph et al. (2017) reported positive relationships between conscientiousness, extraversion, agreeableness, openness to experience, and overall job crafting (also in the JD-R perspective). In contrast, neuroticism is unrelated to overall job crafting. After comparing these two studies, the inconsistent relationships between personalities and job crafting reveal the necessity to consider the interaction effects of individual personalities and context factors because individuals have the tendency to be influenced by their around context.

Prior research also verified the predictive effects of regular focus on job crafting behaviors. According to Petrou and Demerouti (2015), promotion focus is positively related to seeking resources and seeking challenges, and prevention focus is positively related to reducing demands. They also investigated the above relationships in a weekly level, such that weekly promotion focus was positively related to weekly expansive crafting (i.e. weekly seeking resources and weekly seeking challenges); weekly prevention focus was positively related to weekly reducing demands. Moreover, the relationship between week-level prevention focus and week-level reducing demands was positively when trait-level prevention was high than when it was low. Brenninkmeijer and Hekkert-koning (2015) reported similar relationships between regular focus and JD-R crafting. They found positive associations between promotion focus and crafting structural resources, crafting social resources, crafting challenges. There was also a positive relationship between prevention focus and crafting hindering demands. Moreover, crafting structural and social resources mediated the relationship between promotion focus and work engagement as well as the relationship between promotion focus and employability. Crafting hindering demands mediated the relationship between prevention focus and employability. According to Berdicchia & Masino (2019), increasing structural resources and challenging demands positively mediated the relationship between promotive control and self-competence, while these two job crafting dimensions negatively mediated the relationship between restrictive control and self-competence. In addition, there was a positive effect of promotive control on work performance via increasing structural resources, increasing challenging demands, and decreasing hindering demands; While there was a negative effect of

restrictive control on work performance via increasing structural resources and increasing challenging demands. Rudolph and colleagues (2017) found that both promotion and prevention focus were positively related to overall job crafting.

Generally, according to previous empirical studies, approach temperament has a positive association with seeking resources and challenges, while avoidance temperament is related to reducing hindering demands. In Bipp and Demerouti's (2015) study, results confirmed that employees scoring high on approach temperament reported seeking resources and demands behaviors. In contrast, employees scoring high on avoidance temperament tended to reduce hindering demands. Besides, the pursuit of avoidance goals led to higher reducing hindering demands and pursuing approach goals led to lower levels of seeking resources and/or challenges.

Personal initiative is expected a significant predictor of job crafting. Empirical studies have provided some evidence. Tims et al. (2012) verified the positive correlations between personal initiative and increasing structural, and social resources and increasing challenging demands. They also reported a negative correlation between personal initiative and decreasing hindering demands. Similarly, there were positive correlations between personal initiative and task crafting, relational crafting, cognitive crafting, and the overall job crafting (Schachler, Epple, Clauss, Hoppe, Slemp, & Ziegler, 2019). Matsuo (2019b) reported that personal growth initiative facilitated increasing structural resources, increasing social resources, and increasing challenging demands positively. Personal growth initiative positively influenced psychological empowerment through increasing structural job resources and increasing challenging job demands. Additionally, personal growth initiative promoted psychological empowerment through increasing social resources, and, subsequently, through increasing challenging job demands.

Prior research mainly explored the positive relationship between workaholism and expansive JD-R crafting. According to Hakanen, Peeter, and Schaufeli (2018), workaholism positively influenced increasing structural resources and increasing challenging demands. Zeijen, Peeters, and Hakanen (2018) found that the relationships between workaholism and seeking challenges, seeking structural resources, and seeking resources were all positive. Moreover, the relationships between workaholism and seeking challenges, workaholism and

seeking structural resources, workaholism and seeking social resources were all positively mediated through the self-goal setting. Future research should pay additional attention to the association between workaholism and reductive JD-R job crafting (i.e., decreasing hindering demands). Moreover, the associations between workaholism and the original theoretical job crafting concept (including task, relational, and cognitive crafting) are not investigated yet.

Previous research has reported the positive prediction of optimism on job crafting. According to Tadić Vujčić (2019), optimism significantly and positively related to job resources crafting. Moreover, job resources crafting were also a significant mediators in the relationship between optimism and work engagement. Thun and Bakker (2018) indicated that optimism was a significant and positive predictor for both increasing structural resources and increasing challenging demands. There was a negative relationship between optimism and decreasing hindering demands. In addition, the association between empowering leadership and increasing structural resources and the relationship between empowering leadership and increasing challenging demands were stronger from employees with a higher level of optimism. The prediction effects of optimism on task, relational, and cognitive crafting should be explored in future research because optimism has the potential to influence cognitive crafting.

Previous studies have proved the positive relationships between work orientations and JD-R crafting. Living a calling had positive associations with crafting structural resources, crafting hindering demands, crafting social resources, and crafting challenging demands. Moreover, job crafting sub-dimensions mediated the relationship between living a calling and work engagement (Li & Yang, 2018). Walk and Handy (2018) indicated that calling orientation was positively related to internal job crafting and structural job crafting. Besides, calling orientation strengthened the negative relationship between the impact of change on the profession and structural job crafting. However, Leana and colleagues (2009) reported different findings. In their study, the calling orientation toward work was not a significant predictor. On the contrary, the career orientation was positively related to individual job crafting. The inconsistent findings appealed that more empirical studies are needed in the future.

The study from Mazzetti, Lancioni, Derous, and Guglielmi (2018) proved that boundaryless career orientation could predict the overall JD-R crafting positively. Specifically, boundaryless career orientation was negatively related to job insecurity through the subsequent

mediation first of job crafting, and then knowing why/how/whom competences. Another study verified the positive relationship between learning goal orientation and increasing challenging job demands (Matsuo, 2019a). Moreover, increasing challenging job demands mediated the relationship between learning goal orientation and work engagement, and reflection positively moderated the relationship between learning goal orientation and seeking challenges. Future research should explore the influence of the other two work orientations (i.e., job orientation and career orientation) on job crafting. Applying job crafting based on the original theoretical concept (e.g., task, relational, and cognitive crafting) is also promising.

Kwon, M. Kim, and M. S. Kim (2019) reported a significant positive relationship between positive affect and overall job crafting. They also indicated that employees who were high in positive affect were more likely to experience job crafting when they had a low level of LMX. Mäkikangas, Bakker, and Schaufeli (2017) investigated the relationship between positive affect and job crafting at the team level. They reported that individual team members' affect was positively associated with their perceptions of team job crafting at the team level. In other words, the higher the individuals' daily affect, the higher their perceptions of their team's job crafting.

Akkermans and Tims (2017) found that career competencies were a positive predictor of job crafting. Moreover, job crafting was a positive mediator for the positive relationships between career competencies and both internal and external perceived employability. Job crafting was also a positive mediator for the positive relationship between career competencies and work-home enrichment. Previous researchers suggested that personal job resources had a direct positive influence on both individual and collaborative crafting (Chen, 2019).

Previous job crafting scholars also paid attention to the influence of employees' employment on job crafting. For example, Lin, Law, and Zhou (2017) reported an inverted U-shape relation between perceived underemployment and task crafting. Moreover, objective underemployment exerted an indirect curvilinear effect on task crafting through perceived underemployment. Another study explored another employment state, which was perceived over-qualification. Z. Wang, Lu, and X. Wang (2019) found that perceived over-qualification and work alienation were both significantly and negatively related to overall job crafting.

The previous study revealed that employees with a high level of adaptability exposed themselves more easily to change. Such adaptable individuals took good advantages of change

to achieve good job and career outcomes. Wang, Demerouti, and Blanc (2017) reported that workers' adaptability had a significant positive mediation effect on the relationship between transformational leadership and seeking resources as well as seeking challenges.

In sum, prior research has investigated the prediction effects of various individual factors on job crafting, involving personal needs, personalities, focus, temperament, individual resources, orientations, and other individual differences. Most studies applied various JD-R job crafting scales. In the future, the associations between individual differences and task, relational, as well as cognitive job crafting, should be explored. Moreover, regarding the inconsistent findings of the predictions of personal personalities on job crafting, researchers need to consider the potential interactive effects between such personalities and contextual factors. According to the reciprocal causation model, the work environments, personalities, and behaviors can shape each other in a longitudinal reciprocal process (Wu & Li, 2016).

## 2.3.2 Motivational characteristics

Motivational factors have also been explored to trigger individuals' self-started crafting behaviors. According to the current job crafting literature, prior studies mainly focused on the predictions of the following motivational characteristics: efficacy; engagement; intention to JD-R crafting; organizational embeddedness; affective commitment; organizational identification; job satisfaction; exhaustion; willing to change; work discretion; public service motivation; and employees' psychological states, such as psychological safety, psychological capital, psychological empowerment, psychological resilience.

Several empirical studies revealed the positive prediction of self-efficacy on job crafting (i.e., Ingusci et al., 2019; Kanten, 2014; Miraglia, Cenciotti, Alessandri, & Borgogni, 2017; Rudolph et al., 2017; Tadić Vujčić, 2019; Tims, Bakker, & Derks, 2014). However, all these studies applied the job crafting scales based on the JD-R theory. Some of them used the overall job crafting variable or the expansive job crafting variables (e.g., seek resources and seek challenges). The relationship between self-efficacy and decreasing hindering demands is not clear. Future research could also extend the literature by using task, relational, and cognitive crafting dimensions. Previous research also investigated creative self-efficacy and self-efficacy

for teamwork as predictors of job crafting. According to Kim, Im, and Qu (2018), creative self-efficacy was positively related to task crafting, relational crafting, and cognitive crafting. Schachler et al. (2019) also reported a positive correlation between creative self-efficacy and the composite job crafting. Mäkikangas and colleagues (2017) found that self-efficacy for teamwork was positively associated with team JD-R crafting at the within-team level.

There is much empirical evidence that has verified the positive effect of work engagement on job crafting. For example, Zeijen and colleagues (2018) found that work engagement related positively to seeking challenges and seeking resources (see also Tims et al., 2014). Moreover, self-goal setting and self-observation mediated the above positive relationships. Hakanen and colleagues (2018) found that work engagement was positively related to increasing structural resources, increasing social resources, and increasing challenging demands, but was negatively associated with decreasing hindering demands. Similarly, Harju, Hakanene, and Schaufeili (2016) reported that work engagement positively predicted increasing structural resources and increasing social resources. Mäkikangas (2018) found that a high level of work engagement predicts employees' use of the approach type of job crafting (i.e., increasing resources and challenges). According to Lu et al. (2014), work engagement had a significant indirect effect on changes in needs-supplies fit through changes in relational crafting and changes in demands-abilities fit through changes in physical job crafting. Moreover, the positive relationship between work engagement and relational crafting became stronger under conditions of high job insecurity. Vigor, a sum-dimension of work engagement, had a positive correlation with the overall job crafting (Schachler et al., 2019). Robledo, Zappalà, and Topa (2019) also proved that engagement was an antecedent of the overall JD-R job crafting. Moreover, job crafting mediated the relationship between engagement and job performance and flourishing.

The empirical study from Tims and colleagues (2015) indicated that intention to craft job resources and challenging job demands was positively related to increasing job resources and challenging demands. In addition, the direct effect from intention to decreasing hindering job demands and decreasing hindering demands was also positively significant.

Organizational embeddedness and affective commitment were both positively related to the overall job crafting (Qi, Li, & Zhang, 2014). Additionally, organizational identification was positively related to seeking resources and negatively associated with reducing hindering

demands (Wang et al., 2017b). Schachler and colleagues (2019) verified that there was a positively correlated relationship between job satisfaction and task crafting, relational crafting, cognitive crafting, and the overall job crafting variable.

Petrou, Demerouti, and Schaufeli (2015) found that employees' willing to change could facilitate seeking resources and seeking challenges, while exhaustion was positively related to reducing demands. Work discretion was found to be a significant positive facilitator for both individual job crafting and collaborative job crafting behaviors (Leana et al., 2009). Tuan (2019) indicated that public service motivation predicted the overall JD-R job crafting. For the above predictors, future research could use the original theoretical job crafting concept (including task, relational, and cognitive crafting) to reinforce the findings.

Previous empirical studies also paid attention to employees' psychological conditions, including psychological safety, psychological capital, and psychological empowerment. Plomp, Tims, Khapova, Jansen, and Bakker (2019) found that, for permanent employees, psychological safety was positively linked to increasing structural resources, increasing social resources, and increasing challenging demands. Additionally, psychological safety was negatively associated with decreasing hindering demands for both permanent and temporary workers. Moreover, for permanent workers, increasing challenging demands mediated the positive relationship between psychological safety and perceived employability; while decreasing hindering demands negatively mediated the relationship. In another empirical study, Cenciotti, Alessandri, and Borgogni (2017) reported that psychological capital predicted the overall JD-R job crafting positively. Besides, the overall JD-R job crafting mediated the relationship between psychological capital and job satisfaction as well as promotions. Another psychological condition, psychological empowerment, was reported as a significant facilitator of increasing structural resources behavior (Dash & Vohra, 2019). Psychological resilience was also a significant positive facilitator of the overall JD-R expansive job crafting (Wang et al., 2019). In the future, the predictions of other types of psychological statements on job crafting could be explored, such as psychological distress and psychological health.

In short, motivational antecedents of job crafting mainly involve self-efficacy, work engagement, intentions for job crafting, affective commitment, organizational identification, job satisfaction, psychological factors, and so on. The relationships between some antecedents

and job crafting need to be verified by using task, relational, and cognitive crafting measurements, for example, self-efficacy, organizational embeddedness, organizational identification, willingness to change, exhaustion, work discretion, public service motivation, and psychological factors. In the future, the predictive effects of psychological distress and psychological health on job crafting can be explored.

### 2.3.3 Job characteristics

In the job crafting literature, job characteristics were curial antecedents. A lot of empirical studies have focused the prediction effects of job characteristics, including job resources, job demands (i.e., quantitative job demands and workload), task characteristics (including autonomy, task identity, task significance, and feedback from the job), knowledge characteristics (involving skill variety, social skill, and day-level skill utilization), perceived opportunities (i.e., perceived job crafting opportunities and perceived opportunities for professional development), and other characteristics (including job enlargement, work pressure, job boredom, burnout, and participation in decision making).

By designing a cross-sectional and cross-cultural study, Gordon, Demerouti, Le Blanc, and Bipp (2015) found that both job demands and job resources could predict the overall JD-R job crafting. Through comparing the two samples of American and Dutch health care professionals, the authors indicated that job demands (i.e., work pressure, cognitive demands, and emotional demands) were positively related to seeking resources, while job resources (i.e., social support, feedback, and leadership) were positively associated with seeking challenges and resources, and negatively with reducing demands. Quantitative job demands were reported to predict leisure crafting behaviors, which was defined as the "proactive pursuit and enactment of leisure activities targeted at goal setting, human, connection, learning and personal development" (Petrou & Bakker, 2016, p. 512).

Some empirical studies also focused on another type of job demands: workload. Rudolph and colleagues reported that workload had a positive prediction on the overall JD-R job crafting. When pointing to the job crafting dimensions, Petrou and colleagues (2016) found that the workload was negatively associated with seeking resources and reducing demands, but

positively related to seeking challenges in the Geek sample. In their Dutch sample, the workload was positively related to seeking resources but negatively linked to reducing demands. After adding the interaction effect of autonomy, their results showed that the high-strain (i.e., high workload and low autonomy) condition related positively to seeking resources in both Greek and Dutch sample; while in the Dutch sample, workload also related negatively to reducing demands when autonomy was high. Another study from Solberg and Wong (2016) indicated that perceived role overload was negatively associated with the overall job crafting.

A great deal of recent research showed that autonomy was a significant facilitator of job crafting (i.e., Bizzi, 2017; Dierdorff & Aguinis, 2018; Gu-Ne & Lee, 2016; Kim et al., 2018; Nagy, Johnston, & Hirschi, 2019; Petrou, Demerouti, & Xanthopoulow, 2017; Rudolph et al., 2017; Schachler et al., 2019; Sekiguchi et al., 2017; Zito, Colombo, Borgogni, Callea, Cenciotti, Ingusci, & Cortese, 2019). Some other studies have paid attention to the influence of various kinds of autonomy, including occupation-level autonomy (Dierdorff & Aguinis, 2018), contact's autonomy (Bizzi, 2017), autonomy support (Slemp, Kern, & Vella-Brodrick, 2015), and leader-subordinate autonomy expectation congruence (Wong, Škerlavaj, & Černe, 2017). Task identity, task significance (Gu-Ne & Lee, 2016), and feedback from the job (Kanten, 2014) were also significant positive predictors of the overall job crafting.

Regarding skill variety, prior studies reported that skill variety was positively related to seeking resources (Bipp & Demerouti, 2015) and the overall JD-R job crafting (Kanten, 2014). Some specific skills were also explored. Specifically, social skill (Sekiguchi et al., 2017) and day-level skill utilization (Cullinane, Bosak, Flood, & Demerouti, 2017) could facilitate the composite job crafting based on the original conceptualization and day-level resources seeking behavior respectively.

Employees who perceived the opportunity to craft their jobs would be more likely to optimize job resources and demands through job crafting (Van Wingerden & Poell, 2017). Besides, when employees perceived the opportunities for professional development, they tended to engage in more the overall job crafting behaviors, as well as increasing structural and social resources and increasing challenging demands (Nipper, Van Wingerden, & Poell, 2018).

Job enlargement is an effective work characteristic, which can provide regular and ongoing opportunities for enactive mastery. Berdicchia, Nicolli, and Masino (2016) reported that job

enlargement was a significant positive antecedent for both increasing structural resources and increasing social resources.

The previous study found that some unfavorable work conditions could motivate employees to engage in job crafting behaviors as well, such as work pressure, job boredom, and burnout. Petrou et al. (2012) reported that day-level work pressure predicted day-level reducing demands negatively. However, the negative relationship became weaker when employees had a high level of job autonomy. Moreover, day-level of work pressure facilitated more day-level seeking resources behaviors as well when workers perceived a high autonomy. Another empirical study verified the negative relationship between job boredom and increasing structural resources (Harju et al., 2016). Burnout was found to predict decreasing hindering demands positively and influence increasing structural resources negatively (Hakanen et al., 2018).

When employees had the opportunities to participate in the decision-making process, they would engage in more increasing challenging demands and less increasing structural and social resources (Berdicchia & Masino, 2019).

Overall, the previous studies have explored plenty of job characteristics as job crafting antecedents, and most prior research applied the JD-R job crafting scales. In the future, scholars can use different job crafting scales to test the predictions of the variables as mentioned above. Moreover, future research could investigate how knowledge characteristics trigger job crafting systematically. For example, according to Morgeson and Humphrey (2006), knowledge characteristics, such as job complexity, information processing, problem-solving, specialization, also had an essential influence on employees' work experience.

### 2.3.4 Social characteristics

The social context could influence employees' job crafting significantly. The current job crafting literature has involved the influence of the following social characteristics on job crafting: support (i.e., social support, autonomy support, and perceived organizational support), social ties, task interdependence, contacts' job characteristics (including contacts' autonomy, significance, and feedback), quality of organizational change communication, quality of

communication, perceived customer participation, and leadership (involving the perception of empowering/direct/aversive leadership, leader-member exchange (LMX), ambidextrous leadership, employee-oriented leadership, servant leadership, leaders' emotional healing, transformational leadership, connecting leadership, and paternalistic leadership). Although Wrzesniewski and Dutton (2001) proposed that task interdependence was a job feature, I prefer to emphasize its social features in the present review, which is consistent with Morgeson and Humphrey's (2006) classification. Morgeson and Humphrey (2006) highlighted that interdependence reflects the "connectedness" of jobs to each other. Such a workflow requires effective communication and interactions among employees. Thus, defining interdependence as a social characteristic is appropriate.

As mentioned in the previous section, social support, a kind of job resources, was positively associated with seeking challenges and resources, and negatively with reducing demands (Gordon et al., 2015). According to Slemp et al. (2015), autonomy support, defined as the degree of perceived autonomy supportiveness felt towards one's workplace manager, had a positive prediction effect on employees' overall job crafting behaviors (defined in terms of three sub-factors: task, relational, and cognitive). Kim et al. (2018) proved that perceived organizational support was positively related to cognitive crafting. In the study from Leana and colleagues (2009), supportive supervision, interdependence, and social ties were all positively related to collaborative crafting behaviors.

Contact is also an essential component of ones' social context. One empirical study explored the prediction effects of job characteristics of ones' contacts on the worker's job crafting behaviors (Bizzi, 2017). The study showed that contact's autonomy, task significance, and feedback from the job facilitated the employee's overall job crafting behaviors. The empirical research that focusing on the contacts is limited. Future research could explore the influence of other characteristics of the contacts on job crafting and its sub-dimensions, for example, contacts' interdependence, social support, or interaction with others.

Communicating with others is a useful way to obtain information, which may influence employees' job crafting strategies. Petrou, Demerouti, and Schaufeli (2018) focused on the influence of organizational change communication because it could provide adequate and relevant information, which reduced uncertainty. Their findings indicated that the quality of

organizational change communication was negatively related to reducing demands. Moreover, the quality of organizational change communication positively predicted resources seeking and challenges seeking when employees had a high level of promotion focus. The interaction term between change communication and prevention focus negatively predicted seeking challenges. Another study found that the quality of communication was negatively related to internal job crafting (Walk & Handy, 2015). Loi, Xu, Chow, and Chan (2019) reported that perceived customer participation had a positive relationship on task, relational, and cognitive crafting behaviors.

Leadership is a vital social context for most employees. Plenty of studies had explored the influence of various leaderships on job crafting, such as the perception of empowering leadership (i.e., Dash & Vohra, 2019; Esteves & Pereira Lopes, 2017; Kim & Beehr, 2018; Thun & Bakker, 2018; Yang, Ming, Ma, & Huo, 2017) and transformational leadership (Afsar, Masood, & Umrani, 2019; Darogheh, 2019; J. Hetland, H. Hetland, Bakker, & Demerouti, 2018).

Regarding empowering leadership, Dash and Vohra (2019) revealed a significantly positive relationship between empowering leadership and increasing structural resources. According to Thun and Bakker (2018), empowering leadership was positively associated with expansive JD-R job crafting, including increasing structural and social resources, and increasing challenging demands. However, the findings from Esteves and Pereira Lopes (2017) only confirmed the positive relationships between empowering leadership and increasing social resources and challenging demands. Kim and Beehr (2018) found that empowering leadership was a significant antecedent of the overall JD-R job crafting.

As to transformational leadership, Darogheh (2019) verified the positive relationship between transformational leadership and promotional job crafting, as well as the negative relationship between transformational leadership and preventional job crafting. According to Afsar et al. (2019), transformational leadership was positively related to increasing structural and social resources as well as increasing challenging demands. However, Hetland and colleagues (2018) only confirmed the positive association between transformational leadership and increasing social and structural resources.

Predictions of other types of leaderships include perception of directive leadership and

aversive leadership (i.e., Esteves & Pereira Lopes, 2017), LMX (e.g., Qi, Zhang, Fu, Zhao, & Wang, 2019), ambidextrous leadership (Luu, Dinh, & Qian, 2019), servant leadership (i.e., A. Bavik, Y. L. Bavik & Tang, 2017; Harju, Schaufeli, & Hakanen, 2018; Yang et al., 2017), paternalistic leadership (Tuan, 2018), leader's emotional healing (Yang et al., 2017), and connecting leadership (Mäkikangas et al., 2017).

In sum, the current job crafting literature has addressed the predictive influence of leaderships, contacts' task characteristics, specific social characteristics, and quality of communications on job crafting. Social context has a very important role when employees craft their relational boundaries. However, empirical studies, that explore social factors as antecedents of job crafting, are very limited. Among the limited empirical studies, most research has focused on leadership as job crafting antecedents. Except for leadership, employees also need to interact with their colleagues, customers, patients, and other contacts. In the future, scholars should pay attention to the impact of such social context on employees' job crafting behaviors.

More importantly, regarding social characteristics, previous studies involved social support, autonomy support, perceived organizational support, and task interdependence. There is no empirical study that addresses the influence of interaction outside the organization on job crafting, especially on task crafting, relational crafting, and cognitive crafting. Therefore, I will investigate the relationships in the next empirical chapter.

### 2.3.5 Collective characteristics

After summarizing the current job crafting literature, I find that collective characteristics can influence employees' individual job crafting significantly, including team job crafting, collective job crafting, innovative team climate, team cohesion, human resource practice, human resource flexibility, high impact of organizational change, occupational-level autonomy, and occupation differences.

Previous research found that the overall team or collective JD-R job crafting was positively related to the overall individual JD-R job crafting behaviors (Tuan, 2019). Tims, Bakker, Derks, and Van Rhenen (2013) tested the relationship between team job crafting and

individual job crafting by using job crafting sub-dimensions. They reported that team crafting job resources and challenging demands related positively to individual structural resources, social resources, and challenging demands. Team crafting hindering demands was also positively related to individual crafting hindering demands.

The team climate also had an effective influence on job crafting behaviors. The study from Mäkikangas et al. (2017) indicated that an innovative team climate, which was characterized by a clear vision of the teams' targets, supportiveness, and innovation, was positively related to daily team job crafting at both the within- and between-team levels. Team cohesion was also positively and significantly associated with team job crafting at the within-team level.

The human resource practice provided by the organizations had an effective impact on employees' job crafting behaviors (Guan & Frenkei, 2018). When employees perceived that the human resource practices were distinctive, consistent, and consensually implemented by supervisors and line managers, they would engage in more overall JD-R job crafting behaviors. Besides, job crafting mediated both the relationship between employee perceptions of human resource practice and employee performance, and the relationships between human resource practice, work engagement, and performance. Tuan (2019) found that human resource flexibility could facilitate both individual and collective job crafting positively. Moreover, knowledge sharing mediated the above relationships.

Organizational change could also affect employees' job crafting behaviors. According to Petrou et al. (2015), the impact of organizational change was positively associated with reducing hindering job demands. Reducing hindering demands mediated the relationship between organizational change and exhaustion.

Finally, occupational characteristics also have a significant influence on workers' job crafting behaviors. Employees in different occupations implement different crafting strategies. Dierforff & Aguinis (2018) verified that occupation difference and occupation-level autonomy-crafting positively predicted overall job crafting, data crafting, people crafting, things crafting, information input crafting, mental process crafting, and interaction with others crafting behaviors. Autonomy at the occupation-level was reported to negatively facilitate the overall crafting, data crafting, mental process crafting, and work output crafting. However, in the current literature, the empirical job crafting study at the occupational level is very limited.

Future research should investigate different job crafting activities in various occupations.

In all, collective climate has an influential impact on employees' self-initiated behaviors. However, previous studies which investigating such variables are very limited. Collective characteristics include team level, organizational level, occupational level, and culture level. Although several empirical studies investigated the impact of team climate, organizational support, and occupational difference and autonomy, the influence of different cultures on job crafting is not clear.

### 2.3.6 Summary

The present job crafting literature has mainly involved five categories as job crafting antecedents: individual differences, motivational characteristics, job characteristics, social factors, and collective characteristics. Among these five categories, most prior job crafting empirical studies have focused on the predicting effects of individual differences and job characteristics. There is plenty of research that has explored the role of leaderships in job crafting as well. Employees' social context has the potential to influence employees' crafting behaviors because the social environment could provide information and cues for employees to adjust their behaviors. Such a context also can meet individuals' needs for relatedness. However, relevant empirical studies are rather limited. Thus, I will explore the influential effect of four social characteristics on workers' job crafting behaviors in Chapter 3.

### 2.4 Outcomes of job crafting

Job crafting initiated by employees has a significant influence on various outcomes. Previous review papers classified job crafting outcomes simply. Wang and colleagues (2017a) categorized job crafting outcomes on the individual and organizational level by distinguishing immediate and long-term effects. Their categories of job crafting outcomes consisted of (1) immediate individual outcomes (i.e., work engagement and need satisfaction), (2) long-term individual outcomes (i.e., person-job fit, work meaning and identity), (3) immediate organizational outcomes (i.e., job performance and job satisfaction), (4) long-term organizational outcomes (i.e., job design and organizational commitment), and (5) potential

negative outcomes (i.e., counterproductive work behavior, stress, and frustration). Their categories only distinguished individual and organizational outcomes based on different time periods. The current job crafting literature needs more detailed classifications.

According to another integrative review work, Zhang and Parker (2019) explained job crafting outcomes mainly from the individual level, and they provided a detailed classification of individual outcomes. In their review, outcomes of job crafting have four primary categories: (1) individual attitudes (i.e., person-job fit, meaningfulness, work engagement, job satisfaction, organizational commitment, job boredom, and intention to leave/stay), (2) individual behaviors (i.e., task and contextual performance, creativity, adaptivity, and counterproductive work behavior), (3) individual well-being (i.e., psychological and subjective well-being, need satisfaction, positive/negative affect, burnout, job strain, and psychological distress), and (4) other outcomes (psychological capital, employability, and coworker's job crafting behavior, attitudes, and well-being). Although the detailed categorization from Zhang and Parker (2019) can help us understand various individual-level outcomes of job crafting, it doesn't include collective outcomes or potential negative outcomes of job crafting.

As the above categories of job crafting outcomes are not comprehensive, I will classify job crafting outcomes by applying the following categories, (1) individual attitudes, (2) individual motivational outcomes, (3) individual behaviors, (4) individual psychological outcomes, (5) job characteristics, (6) collective outcomes, (7) potential negative outcomes, and (8) other outcomes. In this categorization, different types of individual outcomes of job crafting are distinguished, including individual attitudes, individual motivational outcomes, individual behaviors, and individual psychological outcomes. Moreover, this classification also includes some new categories, such as job characteristics and collective outcomes. Although the volume of relevant empirical studies for these two categories is limited, they are totally different from other categories and they are worthy for job crafting scholars to pay attention to. Detailed variables for each category are listed in Table 2.

**2.4.1 Individual attitudes outcomes**

Much evidence has shown that how employees craft their work have an influential impact

on individual attitudes, such as person-job fit, work commitment, work engagement, job satisfaction, and work meaningfulness, work impact, job insecurity, work alienation, and job boredom. Specifically, Lu and colleagues (2014) revealed that changes in physical job crafting mediated the relationship between work engagement and changes in demands-abilities fit. Additionally, changes in relational job crafting mediated the relationship between work engagement and changes in need-supplies fit. Besides, scholars have reported that job crafting also had an influence on person-organizational fit (Bakker, 2018).

Previous studies have explored work commitment and career commitment as significant work outcomes of job crafting. For instance, Dash and Vohra (2019) verified the positive association between increasing structural resources and affective commitment. Kim and Beehr (2018) found that overall JD-R crafting could trigger career commitment positively.

Dozens of empirical studies investigated work engagement as one outcome of job crafting, including general work engagement (e.g., Petrou et al., 2018; Petrou, Demerouti, & Xanthopoulou, 2017), daily work engagement (Nipper et al., 2018), weekly work engagement (Petrou, Bakker, & Van den Heuvel, 2017), and sub-dimensions (i.e., vigor, dedication, and absorption; Li & Yang, 2018).

Table 2 Overview of job crafting outcomes

| Job crafting outcome categories | Variables |
| --- | --- |
| A. Individual attitudes | (1) Person-job fit; (2) work commitment; (3) work engagement; (4) job satisfaction; (5) work meaningfulness; (6) perceived work impact; (7) job insecurity; (8) work alienation; |
| B. Individual motivational outcomes | (1) Self-efficacy; (2) the need for autonomy and relatedness; (3) self-image; |
| C. Individual behaviors | (1) Job performance; (2) OCB; (3) proactive behavior; (4) creativity; (5) efficiency; (6) customer service behavior; (7) bored behavior; (8) physical complains; (9) general neglect; |
| D. Individual psychological outcomes | (1) Well-being; (2) psychological distress; (3) positive affect; negative affect; (4) psychological availability; (5) psychological capital; (6) psychological empowerment; (7) psychological ownership; (8) intentions to stay; (9) readiness to change; (10) negative psychological states: burnout; quitting intentions; stress; depression; loneliness in work; anxiety; |
| E. Collective outcomes | (1) Partner's day-level seeking challenges; partner's day-level seeking resources; (2) partner's ratings of actor's team member adaptivity; (3) teamwork;   (4) team members' perceived team performance; team service recovery performance; (5) financial performance of an organization; (6) pay fairness; (7) process improvement; |
| F. Other outcomes | (1) Quality of care; (2) citizen value co-creation; (3) opportunities for professional development; (4) flourishing; (5) employability; (6) work-family enrichment; work -home conflict; work-home interference; work-self facilitation; (7) actor's day-level self-reported team member adaptivity; (8) job demands (role ambiguity; bureaucracy); role overload; role conflict; |

Most relevant empirical studies applied the JD-R job crafting scale. For example, Kooij and colleagues (2017a) reported significantly positive relationships between increasing resources and challenging job demands and work engagement. They also found a negative relationship between decreasing hindering job demands and work engagement because decreasing hindering demands cost employees' energy, and it would result in less psychologically stimulating and job boredom. Employees might diminish their perceptions of good performance.

The current literature also revealed the relationships between job satisfaction (e.g., Cheng, Chen, Teng, & Yen, 2016; Cheng & Yi, 2018; Slemp et al., 2015; Plomp et al., 2016), as well as career satisfaction (Cenciotti et al., 2017; Dubbelt, Demerouti, & Rispens, 2019; Kim & Beehr, 2018), and job crafting.

Previous literature included work meaning, work impact (Bruning & Campion, 2018), weekly meaning-making (Petrou et al., 2017a), meaningful work (Tims, Derks, & Bakker, 2016; Vermooten et al., 2019), and work meaningfulness (Nagy et al., 2019) as job crafting outcomes. Based on the current job crafting, there are only three empirical studies, which explored meaningful work or work meaningfulness as job crafting outcomes. All these studies applied JD-R crafting conceptualization. Thus, how task, relational, and cognitive crafting influence meaningful work is not clear. This research gap will be explored in chapter 4.

Besides, Prior research revealed job insecurity and work alienation as potential job crafting outcomes. In particular, Mazzetti et al. (2018) reported a positive relationship between the overall JD-R job crafting and job insecurity. Work alienation was defined as a cognitive and affective state of separation from work, which consists of five inter-related feelings, namely powerlessness, meaninglessness, normlessness, social isolation, and self-estrangement (Dash & Vohra, 2019). The study from Dash and Vohra (2019) revealed a negative association between increasing structural job resources and work alienation because structural crafting behavior was likely to increase employees' perception of meaningfulness, relatedness, and self-expressiveness.

**2.4.2 Individual motivational outcomes**

Previous research also verified some motivational outcomes of job crafting, including self-efficacy, the need for autonomy and relatedness, self-image, and perceived impact. Miralia, Cenciotti, Alessandri, and Borgogni (2017) revealed that the overall JD-R job crafting could predict self-efficacy positively because job crafting enables employees to act upon their work context, consequently reinforcing their perceived confidence to control and influence the context.

Petrou and Bakker (2016) investigated the relationships between leisure crafting and

employees' weekly need satisfaction. Leisure crafting was defined as the proactive pursuit and enactment of leisure activities targeted at goal setting, human connection, learning, and personal development. They indicated that leisure crafting was positively associated with weekly autonomy and relatedness need satisfaction because leisure crafting assisted individuals to experience life as a result of free choices and internal locus of causality. Moreover, leisure crafting had the potential to fulfill employees' need for human connection, loving, and being loved (Petrou & Bakker, 2016).

Lyons (2008) reported significant positive correlations between the overall job crafting and self-image, perceived control, and readiness to change. Future research should provide other empirical evidence to reinforce these relationships.

Bruning and Campion (2018) explored the associations between role-resource approach-avoidance job crafting and enrichment (including work meaning and work impact), engagement (physical engagement and cognitive engagement), and work withdrawal (bored behavior, general neglect, and turnover intentions). According to their results, work role expansion crafting, work organization crafting, and work role reduction crafting were positively related to work impact; However, there was a negative association between withdrawal crafting and perceived work impact.

**2.4.3 Individual behaviors**

Job crafting also has the potential to affect employees' behaviors, involving job performance, organizational citizenship behavior, proactive behavior, personal initiative, perceived control, taking charge, creativity, efficiency, and customer service behavior.

A lot of empirical studies explored the prediction of job crafting on various job performance, including job performance (e.g., Kooij, Tims, & Akkermans, 2017; Demerouti, Bakker, & Gevers, 2015), in-role performance (e.g., Tims et al., 2014; Van Wingerden, Bakker, & Derks, 2016), extra-role performance (e.g., Nielsen, Antino, Sanz-Vergel, & Rodríguez-Muñoz, 2017), supervisor-rated task performance, self-rated task performance (Weseler & Niessen, 2016), purser assessment service recovery performance (Karatepe & Eslamlou, 2017), subjective (i.e., adaptive, task, and contextual performance), objective performance (Gordon,

Demerouti, Le Blanc, Bakker, Bipp, & Verhagen, 2018), team members' perceived team performance (Mäkikangas, Aunola, Seppälä, & Hakanen, 2016), team service recovery performance (Tuan, 2018), and creative performance (Gordon, 2015).

Job crafting could also trigger organizational citizenship behaviors (OCB), including general OCB (Guan & Frenkel, 2018; Ingusci et al., 2019), OCB-I (Tims et al., 2014), OCB-O (Rofcanin, Berber, Koch, & Sebinc, 2016; Lin et al., 2017), OCB sub-dimensions (Gong, Greenwood, Hoyte, Ramkissoon, & He, 2018), and interpersonal citizenship behavior (i.e., customer-directed CB, leader-directed CB, and coworker-directed CB) (Bavik et al., 2017).

Baik, Song, and Hong (2018) found that JD-R crafting could facilitate proactive behavior significantly. Especially, seeking job resources was directly related to proactive behavior, and their relationship was positive. Additionally, there were indirect relationships between seeking resources as well as seeking challenges and proactive behavior via work engagement. In the future, the association between task, relational, cognitive crafting, and proactive behavior could be addressed.

Two empirical studies addressed creativity as one job crafting outcome. Demerouti et al. (2015a) found that seeking resources could facilitate creativity through work engagement and flourishing. Reducing job demands could inhibit creativity through work engagement. Lin and colleagues (2017) reported a positive association between task crafting and creativity. In the future, organizational researchers could address how relational and cognitive crafting behaviors affect creativity.

Bruning and Campion (2018) revealed that adoption crafting, work organization crafting, and withdrawal crafting were positively related to efficiency. There was no other empirical study investigating the influence of job crafting on efficiency. Future research could reinforce their results by applying alternative job crafting scales or replicate their study design in different cultures. Job crafting also has a significant impact on employees' customer service behaviors. According to Teng (2019), job crafting had indirect relationships with both role-prescribed service behavior and extra-role service behavior through harmonious passion.

If employees' proactivity didn't work out, workers might experience general neglect (Bruning & Campion, 2018) and physical complains (Kim & Beehr, 2018), and engage in bored behavior (Bruning & Campion, 2018; Harju et al., 2018).

**2.4.4 Individual psychological outcomes**

Consistent with what would be expected, previous studies showed that job crafting could also lead to beneficial psychological outcomes, for example, well-being, psychological distress, positive affect, psychological availability, psychological capital, psychological empowerment, psychological ownership, intentions to stay, and readiness to change. The previous study investigated the influences of job crafting on general well-being (Romeo, Yepes-Baldó, Piñeiro, Westerberg, & Nordin, 2019), subjective well-being (Slemp & Vella-Brodrick, 2013), and psychological well-being (Slemp & Vella-Brodrick, 2013; Yepes-Baldó, Romeo, Westerberg, & Nordin, 2018).

Sakuraya, Shimazu, Eguchi, Kamiyama, Hara, Namba, and Kawakami (2017) revealed that increasing structural resources could decrease employees' psychological distress. However, decreasing hindering demands could facilitate psychological distress positively. Slemp and colleagues (2015) found a positive relationship between job crafting and positive affect and a negative association between job crafting and negative affect.

Psychological availability refers to the sense of having physical, emotional, or psychological resources to personally engage at a particular moment (V. Singh & M. Singh, 2018). It reflects employees' readiness or confidence to engage in tasks. V. Singh and M. Singh (2018) found that the overall JD-R job crafting could trigger psychological availability positively because job crafting could lead to the accumulation of resources and form resource caravans.

Two empirical studies from Vogt, Hakanen, Brauchli, Jenny, and Bauer (2016) and Cenciotti et al. (2017) verified the positive association between the overall JD-R job crafting and psychological capital. Matsuo (2019b) reported positive relationships between JD-R job crafting sub-dimensions (i.e., increasing structural resources and increasing challenging demands) and psychological empowerment.

By designing two studies, Wang, Demerouti, Blanc, and Lu (2018) proved the influence of the overall JD-R job crafting on psychological ownership. Psychological ownership refers to the feelings of possession of some job elements or the job as a whole. According to Wang and colleagues, job crafting could activate and satisfy employees' motives for efficacy, self-

identity, and a sense of belonging, which, in turn, facilitate their perception of psychological ownership.

Rofcanin et al. (2016) verified that all the JD-R job crafting dimensions, including increasing social and structural job resources, increasing challenging job demands, and decreasing hindering job demands, were positively associated with workers' intentions to stay.

Job crafting also has the potential to lead to dysfunctional or detrimental psychological states on job crafters. When job crafting required extra work time or to expand task scopes, individuals might experience burnout (e.g., Dierdorff & Aguinis, 2018; Tims et al., 2013a, 2015; Travaglianti, Babic, & Hansez, 2016; V. Singh & M. Singh, 2018; Walk & Handy, 2018), quitting intentions (Bruning & Campion, 2018; Dierdorff & Aguinis, 2018; Dominguez, Stassen, de Grave, Sanabria, Alfonso, & Dolmans, 2018; Karatepe & Eslamlou, 2017), stress (Ghadi, 2019; V. Singh & M. Singh, 2018), depression (Ghadi, 2019; Kim & Beehr, 2018), loneliness, and anxiety (Ghadi, 2019).

**2.4.5 Collective outcomes**

Though job crafting is assumed to occur without the involvement of others, empirical studies have indicated that except individuals and the job, employees' job crafting strategies could also change their partners' behaviors. Specifically, scholars (Peeters, Arts, & Demerouti, 2016) found that actors' day level seeking resources and seeking challenges had significant influences on partners' day-level seeking resources and seeking challenges, respectively. Changing work boundaries also affected the employee's partners' rating of his/her team member's adaptivity.

How individual engaging in job crafting could change the team or organization climate, such as teamwork (Bruning & Campion, 2018), team members' perceived team performance (Mäkikangas et al., 2016), team service recovery performance (Luu, 2017), organizational financial performance (Gu-Ne & Lee, 2016), pay fairness (Dierdorff & Aguinis, 2018), and process improvement (Bruning & Campion, 2018).

### 2.4.6 Other outcomes

Beyond the above-mentioned outcomes, employees' job crafting behaviors also had an influential impact on the quality of care (Yepes-Baldó et al., 2018), citizen value co-creation (Tuan, 2018), opportunities for professional development (Van Wingerden et al., 2016), flourishing (Robledo et al., 2019), employability (Akkermans & Tims, 2017; Brenninkmeijer & Hekkert-Koning, 2015; Plomp et al., 2019; Tims et al., 2012), work-family enrichment (Akkermans & Tims, 2017; Loi et al., 2019; Rastogi & Chaudhary, 2018), work-self facilitation (Tresi & Mihelič, 2018), and job crafters' self-reported team member adaptivity (Peeters et al., 2016).

When the job needed the incumbent to put more time and efforts, the individual might perceive more work-home conflict (Bruning & Campion, 2018), work-home interference (Akkermans & Tims, 2017), extra job demands (i.e. role ambiguity and bureaucracy) (Bakker, 2018), role overload, and role conflict (Berdicchia & Masino, 2019).

### 2.4.7 Summary

The current job crafting literature primarily puts its emphasis on the influence of employees' job crafting behavior on individual outcomes. It is reasonable because, generally, job crafting is engaged by employees themselves in order to fulfill personal needs. Through self-started crafting behaviors, workers could perceive unique work meanings and find their personal work identity. Organizational scholars have argued that it is individuals that play an active role in creating work meanings through changing their work boundaries. Moreover, one force of the meaning of work is the individual, especially the personal psychological attributes and characteristics (Wrzesniewski & Dutton, 2001). However, the current literature doesn't involve relevant empirical evidence. How task, relational, and cognitive crafting behaviors influence meaningful work, as well as the moderating role of individual differences, is not clear. This research gap will be made up in chapter 4.

### 2.5 Moderators

The effect of triggers on job crafting or the effect of job crafting on various work outcomes

is not universal and they often depends on employees' individual differences or job characteristics. In the following sections, I will review the moderators in job crafting literature. By applying similar classification approaches for job crafting antecedents, I also categorize the moderators in five types: (1) individual factors as moderators; (2) motivational characteristics as moderators; (3) job characteristics as moderators; (4) social characteristics as moderators; (5) collective factors as moderators (See Table 3). In Table 3, moderators are distinguished by their role in different relationships: including moderators on the relationships between antecedents and job crafting and moderators on the relationships between job crafting and outcomes.

**2.5.1 Individual differences**

In the job crafting literature, several empirical studies applied individual differences as moderators, including employee status, age, perceived adaptability, boundary control, optimism, organizational-based self-esteem, promotion focus, thriving, and calling orientation. In the following section, I will introduce these moderators in detail.

*Individual differences as moderators on the relationships between antecedents and job crafting*

The effectiveness of job crafting predictors is likely to be moderated by demographic variables, including employee status and age. First, employee status was defined as workers' structural positions, prestige, and power to influence others in the job (Sekiguchi et al., 2017). Sekiguchi and colleagues (2017) reported a significant moderating effect of employee status on the relationship between job autonomy and overall job crafting. The association was more reliable when employee status was high rather than low. The potential reason was that given the same level of autonomy, high-status employees were more powerful to influence others. They were easier to develop positive expectations about their job crafting outcomes and to overcome challenges involving relational constraints. Their perceived opportunities for job crafting would be greater.

Table 3 Overview of Moderators in the job crafting literature

| Categories of moderators | Moderators on the relationships between antecedents and job crafting | Moderators on the relationships between job crafting and outcomes |
|---|---|---|
| A. Individual differences | (1) Age; (2) employee status; (3) boundary control; (4) optimism; (5) organization-based self-esteem; (6) promotion and prevention focus; (7) calling orientation; (8) Reflection; | (1) Millennials; (2) assessment of changes; (3) performance; (4) occupational role salience; |
| B. Motivational characteristics | (1) Organizational identification; (2) work engagement; (3) public service motivation; | (1) Impression management motives; (2) over-commitment; |
| C. Job characteristics | (1) Job insecurity; (2) job autonomy; home autonomy; | (1) Job security; (2) job crafting opportunities; |
| D. Social factors | (1) Leadership: LMX; leader coalition influence; leaders' need for structure; (2) internal social capital; (3) social skill; (4) task interdependence; (5) quality of communication; | (1) LMX; (2) perceived organizational support; (3) betweenness centrality; (4) partner's general level of empathic; |
| E. Collective characteristics | | (1) Serving culture; |

Second, workers' age is also a significant moderator because most employees become more dominant, responsible, self-confident, conscientious, and self-controlling over the lifespan. Aging workers become more equipped to attain developmental tasks and to achieve work goals, and are therefore better able to engage in job crafting. Kooij, Van Woerkom, Wilkenloh, Dorenbosch, and Denissen (2017) reported that age moderated the relationship between participation in a job crafting intervention and job crafting towards strengths, such that older employees responded to job crafting intervention with higher levels of job crafting compared to younger employees. In addition, the indirect positive effects of participation in a job crafting intervention on person-job fit via job crafting towards strengths were stronger for older individuals than younger individuals.

Cullinane et al. (2017) applied boundary control as a moderator in their empirical study. Boundary control refers to the extent to which operators are involved in a variety of activities related to traditional supervisory or first-line management activities in a lean manufacturing context. Cullinane and colleagues found that job-level boundary control moderated the positive

relationship between day-level skill utilization and day-level seeking resources, whereby the link became stronger when boundary control was high as opposed to low.

Personal resources also have the potential to be significant moderators in job crafting empirical studies because it is the employees that engage in self-started initiative behaviors. Previous studies included optimism and organization-based self-esteem as influential moderators. Thun and Bakker (2018) proposed probed optimism as a moderator. Their findings showed that optimism moderated the relationship between empowering leadership and increasing structural resources as well as the relationship between empowering leadership and increasing challenging demands. The higher the level of optimism, the stronger the relationships between empowering leadership and job crafting behaviors. Another empirical study verified the moderating effect of organization-based self-esteem (Loi et al., 2019). A high level of organization-based self-esteem moderated the relationship between perceived customer participation and relational crafting. Additionally, the indirect effect of perceived customer participation on work-to-family enrichment via relational crafting was moderated by high organization-based self-esteem.

Several prior empirical studies in the job crafting literature posited promotion focus and prevention focus as moderators. Hetland et al. (2018) found that workers' promotion focus facilitated the relationships between transformational leadership and followers' daily job crafting behaviors in the form of seeking structural and social resources, and increasing challenging demands. Another empirical study from Petrou, Demerouti, and Schaufeli (2018) reported that organizational change communication predicted more increased job craftings, including seeking resources and challenges, when employees' promotion focus was high. Besides, it promoted seeking challenges negatively when prevention focus was low.

Individuals' work orientation has a potential to affect the relationships between antecedents and employees' job crafting behaviors. Walk and Handy (2018) found that high calling orientation significantly strengthened the negative relationship between the impact of the change on the profession and structural job crafting (actions that require interaction with the environment; capture behavioral responses). However, there has no job crafting empirical study explored job orientation and career orientation as moderators. Future research could investigate relative associations.

Reflection is important when learning from experience. The definition of reflection refers to the extent to which one reviews one's work objectives and work methods periodically. It is a disposition or tendency to reflect on activities or practices (Matsuo, 2019a). According to the study from Matsuo (2019a), reflection positively moderated the relationship between learning goal orientation and seeking challenges, and the relationship became stronger when reflection was high.

***Individual differences as moderators on the relationships between job crafting and outcomes***

Researchers found that generation had the potential to influence the relationship between job crafting and outcomes. The number of millennials (employees born between 1980 and 2000) is growing steadily in the workforce. These employees have the tendency to remain remarkable, and they are more intrinsically motivated by continuous learning and professional development opportunities. They have become major contributor to organizations. According to Gong et al. (2018), being a millennial reinforced the positive relationships between increasing structural resources and three of the five dimensions of organizational citizenship behaviors, namely, altruism, courtesy, and civic virtue. Besides, millennials strengthened the negative relationship between increasing social resources and sportsmanship.

Austerity might lead organizations to make changes, such as lay-offs, reorganizations, cuts in costs, salary reductions, etc. (Demerouti, Xanthopoulou, Petrou, & Karagkounis, 2017). The role of job crafting could change when employees assessed such austerity-led organizational changes. Demerouti and colleagues found that the negative link between reducing demands and adaptive performance strengthened for employees who assessed the changes more negatively. Meanwhile, the link between reducing demands and adaptive performance was positive for employees who assessed the changes more positively. The interaction between seeking resources and assessment of changes on adaptive performance was also significant.

The previous study also found that employees' job performance had a significant moderating role. Wang et al. (2018a) revealed that, for employees with a low level of performance, the positive relationships between JD-R job crafting and psychological ownership, as well as affective organizational commitment, were greater.

Individuals who had high levels of occupational role salience treated their jobs as an important part of self-definition and personal satisfaction (Petrou et al., 2017a). According to

Petrou and colleagues (2017), the weekly increasing social resources, increasing structural resources, and increasing challenging demands were positively associated with work engagement when occupational role salience was high rather than low. Besides, weekly increasing structural resource was associated with weekly meaning-making positively when employees had high occupational role salience.

### 2.5.2 Motivational characteristics

*Motivational characteristics as moderators on the relationships between antecedents and job crafting*

As motivational characteristics can influence employees' choices on job crafting strategies, some research investigated organizational identification, work engagement, and public service motivation as moderators on the relationships between antecedents and job crafting in the literature.

Wang et al. (2017b) found that at low levels of organizational identification, transformational leadership had a significant indirect positive influence on seeking resources and seeking challenges via adaptability.

Bakker (2018) reported that high work engagement had a significant moderating influence on the positive relationship between job crafting and job resources (i.e., opportunities for development and performance feedback), on the positive relationship between job crafting and Person-Organization fit, and on the negative relationship between job crafting and hindrance job demands (i.e., role ambiguity and bureaucracy).

It was proved that when employees displayed high public service motivation, the negative relationship between authoritarianism and the overall JD-R job crafting became weaker. Moreover, high public service motivation also had a moderating role in the positive relationships between benevolence and job crafting as well as the positive relationship between morality and job crafting. When employees had a high level of public service motivation, above positive relationships became stronger.

Future research could apply the original conceptualization of job crafting and relative measurement to test above relationships and investigate other motivational characteristics as

moderators.

*Motivational factors as moderators on the relationships between job crafting and outcomes*

On the relationships between job crafting and its outcomes, previous studies explored impression management motive and over-commitment as moderators.

Impression management motive means that employees have the tendency to present a favorable image to others, for example, pretending to be busy and avoiding interactions. Rofcanin, Bakker, Berber, Gölgeci, & Las Heras (2019) revealed that the positive relationship between expansion oriented relational job crafting and work engagement was weaker from workers driven with impression management motives. When employees high in impression management motive expanded their network, they felt less engaged because such behaviors did not reflect true selves and depleted personal resources such as energy and self-efficacy.

The definition of over-commitment refers to "a set of attitudes, behaviors, and emotions that reflect excessive striving in combination with a strong desire of being approved and esteemed" (Romeo et al., 2019). Over-commitment was examined as a significant moderator of the relationship between task crafting and well-being as well as the relationship between relational crafting and well-being. All low, medium and high levels of over-commitment moderated the effect of task crafting on well-being. However, only medium and high levels of over-commitment had a significant moderating role on the relationship between relational crafting and well-being.

## 2.5.3 Job characteristics

Job characteristics have potential moderating roles as well. Previous studies used job insecurity, job autonomy, home autonomy, job security, and job crafting opportunities as moderators.

*Job characteristics as moderators on the relationships between antecedents and job crafting*

Job insecurity means the amount of uncertainty an employee feels about the job continuity, which has a great impact on employees' attitudes and behaviors (Lu et al., 2014). Employees experience job insecurity when they are uncertain about the future. If they perceive their job have potential unpredictability and uncontrollability, individuals may experience negative

emotions because they are worried about losing the job. Lu and colleagues (2014) reported that work engagement had a significant positive influence on changes in relational job crafting when employees perceived job insecurity to be high.

In another study, Petrou et al. (2017b) found that a low level of job autonomy moderated the positive relationship between workload and seeking resources in their Greek and Dutch samples. Besides, high autonomy strengthened the negative relationship between workload and reducing demands. In another study, Petrou and Bakker (2016) reported that weekly job demands positively related to weekly leisure crafting when job autonomy was low. Their results also revealed a significant three-way interaction among weekly job demands, weekly job autonomy, and weekly home autonomy. In particular, weekly job demands positively related to weekly leisure crafting when weekly job autonomy was low, and weekly home autonomy was high.

***Job characteristics as moderators on the relationships between job crafting and outcomes***

Wang and colleagues (2018a) found that the positive relationship between job crafting and affective organizational commitment was stronger for insecure jobholders than for secure jobholders. Insecure jobholders developed greater work attachment through expansive JD-R job crafting (e.g., seeking resources and challenges).

Not all jobs offer sufficient opportunities for employees to engage in job crafting behaviors. When the job can't satisfy employees' psychological needs, incumbents may use leisure activities (e.g., leisure crafting) to compensate for these needs. Previous scholars found that when baseline job crafting opportunities were low, employees' leisure crafting behavior was positively associated with meaning-making (Petrou et al., 2017a).

**2.5.4 Social characteristics**

***Social characteristics as moderators on the relationships between antecedents and job crafting***

Prior research explored the moderating roles of leadership, internal social capital, social skill, task interdependence, and quality of communication on the relationships between various predictors and job crafting behaviors.

Kwon et al. (2019) indicated that employees who were high in positive affect were more likely to experience job crafting when they had a low level of LMX. In the study by Qi et al. (2019), there was a three-way interactive effect among LMX, internal social capital, and thriving on job crafting. When the level of LMX was high, the effects of internal social capital and thriving on job crafting were strong.

Wong and colleagues (2017) explored leader coalition influence tactics as a moderator. Their findings showed that a high leader coalition influence moderated the strength of the mediated relationship between leader-subordinate autonomy expectation congruence and job crafting via subordinate-perceived competence mobilization.

The need for structure refers to a preference for close monitoring and clear planning and scheduling of work tasks (Solberg & Wong, 2016). Solberg and Wong found that leaders' need for structure, perceived role overload, employees' perceived adaptivity interacted and influenced the overall job crafting. Specifically, the relationship between perceived role overload and job crafting was strongest when employees' perceived adaptivity was high, and leaders' need for structure was low.

Qi and colleagues (2019) explored internal social capital as a moderator. Internal social capital refers to an employee's social trust, norms, values, and resources that are acquired from interpersonal relationships, which can help the individual to achieve individual or collective goals. The authors indicated that at high levels of internal social capital, LMX was significantly associated with the overall job crafting.

Social skill refers to employees' ability to adjust personal behavior based on different and changing situational demands and to effectively influence and control others' responses (Sekiguchi et al., 2017). Good social skills enable employees to interact with others effectively and help them overcome the interpersonal challenges and promote their job crafting behaviors. Sekiguchi and colleagues verified social skill as a significant moderator on the relationship between job autonomy and job crafting; the relationship became stronger when social skill was high rather than low. Moreover, they found a significant three-way interaction between job autonomy, social skill, and employee status. When social skill was high rather than low, the moderating effect of employee status on the relationship between job autonomy and job crafting was weaker.

The previous research used task interdependence as an influential moderator as well. As a kind of job characteristics, task interdependence requires frequent coordination and interactions between team members, which may decrease employees' autonomy. Cullinane and colleagues (2017) found that job-level task interdependence moderated the positive relationship between day-level skill utilization and day-level seeking resources, such that the relationship was stronger when task interdependence was low rather than high.

The previous study also explored the moderating effect of quality of communication. In the study from Walk and Handy (2018), it was verified that high quality of communication weakened the negative relationship between the perceived impact of change and internal job crafting (actions within the person that tend to capture cognitive responses).

### *Social characteristics as moderators on the relationships between job crafting and outcomes*

Regarding the relationships between job crafting and outcomes, previous researchers investigated LMX, perceived organizational support, betweenness centrality, and partners' general level of empathy as moderators.

The study from Tresi and Mihelič (2018) found that LMX moderated the relationship between the overall JD-R job crafting and self-efficacy, and the relationship became stronger for workers with a high quality of LMX. They also reported a significant moderation mediation relationship. The relationship between job crafting and work-self facilitation was moderated by LMX and mediated by self-efficacy. Specifically, high quality of LMX strengthened the positive association between self-efficacy and work-self facilitation.

When incumbents perceive a high level of organizational support, they feel that the organization values and cares about their well-being. Supportive supervisory behaviors (e.g., providing helpful feedback) can encourage workers to craft their work boundaries. Good organizational support also includes emotional support, positive self-esteem, approval, and affiliation (Cheng & Yi, 2018). According to Cheng and Yi (2018), the negative association between job crafting and job burnout was stronger with high levels of perceived organizational support due to the increased availability of resources. In another study by Cheng et al. (2016), the authors revealed that high-perceived organizational support strengthened the positive relationships between individual crafting and job satisfaction, job performance, and organizational commitment. Besides, the relationships between collaborative crafting and job

performance, as well as job satisfaction, were significantly positive only for employees with a low level of perceived organizational support. Meanwhile, the positive association between collaborative job crafting and organizational commitment was stronger for employees with low perceived organizational support than high-perceived organizational support.

The concept of participative decision-making refers to the extent to which organizations and superiors involve employees in the management decision-making process, for example, establishing consultative committees, involving employees in generating alternatives, work planning, and task strategies, consulting subordinated on work issues, and collective problem solving (H. Wang, X. Wang, & Li, 2018). Wang and colleagues (2018b) revealed that when new generation employees perceived high participative decision-making, job crafting was positively associated with the leader-member exchange. However, job crafting was negatively related to the leader-member exchange when participative decision-making was low. Moreover, the indirect effect of job crafting on job performance via leader-member exchange was positive when participative decision-making was high and negative when participative decision-making was low.

Network centrality refers to the position in the structure of interpersonal relationships in the organization and, it determines the possibility of being exposed to contextual information from multiple parts of the organization (Bizzi, 2017). When employees are in the central position of the network, they receive sufficient contextual information and can assess the implications of their job crafting behaviors. Bizzi (2017) found that high betweenness centrality strengthened the positive relationship between job crafting and job performance.

As one aspect of empathy, empathic concern refers to the degree to which individuals feel themselves into another person (Peeters et al., 2016). Peeters and colleagues revealed that high empathic concern from the partner strengthened the crossover of day-level seeking resources from the employee to his/her partner.

**2.5.5 Collective characteristics**

*Collective characteristics as moderators on the relationships between job crafting and outcomes*

Serving culture is viewed as a work context in which members share the behavioral norms and expectations that prioritize the needs and interests of others above their own and provide help and support to others (Luu, 2017). Luu explored the moderating role of serving culture. The results showed that collective job crafting predicted teamwork engagement when serving culture was high.

### 2.5.6 Summary

In a word, among the five categories of moderators, current job crafting empirical studies mainly investigated the moderating role of individual differences and social factors. However, there are still some potential moderators that should be explored. Among the moderators in the individual difference category, there is no study addressing the moderating effects of personalities (e.g., Big Five personalities). According to a conventional and mechanistic interactionism perspective, the interaction effects between dispositional traits and environmental factors have the potential to shape employees' self-initiative behaviors. Thus, in this dissertation, the interactive influence of social characteristics and Big Five personalities will be explored in Chapter 3.

### 2.6 Limitations of the current job crafting literature

The current literature has explored individual differences, motivational characteristics, job characteristics, social characteristics, and collective characteristics as the predictors and moderators of job crafting. The outcomes of job crafting mainly focused on individual attitudes, individual behaviors, individual well-being, and other outcomes. Most empirical studies investigated the outcomes and predictors of job crafting behaviors. Studies that explored the moderating effects were relatively fewer. After reviewing the literature, there are several research gaps that are worthy of paying attention to.

First, most empirical research used measurements based on JD-R crafting conceptualization. As mentioned above, the cognitive crafting behavior is excluded in JD-R crafting. Therefore, future research should apply the original job crafting conceptualization, which including basic task crafting, relational crafting, and cognitive crafting dimensions.

Second, regarding the research volume of job crafting predictors, most empirical studies applied individual factors, motivational characteristics, and job characteristics as antecedents. Empirical research that explored the predictive effects of social characteristics and collective characteristics is relatively limited.

As to social predictors, plenty of studies explored various leadership as job crafting antecedents. The predictive influence of some social characteristics, such as interaction outside the organization and feedback from others, is not clear. Moreover, social factors involve interpersonal relationships not only with leaders but also with colleagues, customers, patients, partners, and so on. However, the review of current literature showed that the effects of such social factors needed further exploration.

Third, when it comes to individual factors as predictors of job crafting, most research used specific individual dispositions or tendencies. Currently, there are only two studies testing the predictive effects of Big Five personalities on the overall job crafting. However, the inconsistent findings of the studies call for further exploration, such as the interactive influence of individual personalities and contextual factors. Moreover, there was no empirical study addressing the influence of the Big Five personality on task crafting, relational crafting, and cognitive crafting.

Forth, regarding the moderating effects, the volume of relative studies is small. Compared to other categories, there are more studies that explored individual differences and social factors as moderators. However, there is a blank space for the investigation of the influence of the interaction effects of social context and individual personalities on job crafting behaviors. In addition, there are no empirical studies that using Big Five personalities as moderators of the relationship between antecedents and job crafting and between job crafting and work outcomes.

## 2.7 Research questions

Among the above research gaps, there comes one research puzzle: *How individual's Big Five personalities moderate the relationships between specific social characteristics and task, relational, and cognitive crafting behaviors and the relationships between job crafting dimensions and meaningful work?* The hypothesized model was designed in Figure 1. Two main research questions have been formulated to direct our studies in this dissertation.

Q1. *(a) How social characteristics predict task, relational, and cognitive crafting behaviors? (b) How do individual personalities influence the above relationships?*

Employees have different strategies to craft their work in different situations. They might expand their task scope or build new interpersonal relationships when they are in a supportive work climate. As social contexts play a significant role in the workplace, many questions need to explore regarding the influence of social context on job crafting. Is task crafting, relational crafting, or cognitive crafting more likely to be encouraged by particular social characteristics (e.g., social support, task interdependence, interaction outside the organization, and feedback from others)? Does individual personality have an influence on the above relationships (e.g., neuroticism)?

Although it is not novel that the effect of social context on employees' responses is contingent on employees' individual differences, it is still worth investigating potential moderators of the social factor-job crafting relationships because it is the employees that have the self-initiatives to change their work based on personal needs. Research coping with this question would provide new insights into the contingencies of the relationship between social context and job crafting as well as the interactive influence of social context and individual personalities.

Q2. *(a) How extensive and reductive job crafting dimensions trigger meaningful work? (b) How Big Five personalities moderate the relationships?*

Though scholars have investigated meaningful work as a significant outcome of job crafting, the empirical evidence of the expansive and reductive job crafting on meaningful work is still lacking. Generally, employees have the tendency to experience meaningfulness during work, but this tendency may be stronger or weaker for some employees. Thus, the magnitude of the relationship between expansive and reductive job crafting and meaningful work is likely to vary according to different individual personalities. Unfortunately, there is no research addressing the moderating effect of Big Five personalities on the relationships between expansive and reductive job crafting and meaningful work. Studies to answer this question would not only advance theories of job crafting by identifying potential moderators but also provide implications that to whom managers should provide more support for job crafting in order to promote employees' work meaningfulness.

## 2.8 The importance of the moderating role of individual personalities

Personality traits are abstractive descriptions and explanations of the affect, behavior, cognition, and desire of individual personalities (Revelle, 2008). Generally, researchers use five basic factors, often labeled as the Big Five, to categorize different personalities. Big Five personalities include (I) extroversion, (II) conscientiousness, (III) neuroticism, (IV) openness to experience, and (V) agreeableness. Although individual personalities could be influenced and altered in a long period, they are relative stable in a short time. Thus, I assume that employees' personality traits are unchangeable for short terms.

Extroversion is characterized by a need for stimulation, assertiveness, and activities. It includes six facets: warmth, gregariousness, assertiveness, activity, excitement seeking, and positive emotions (Wu & Li, 2016). Conscientiousness refers to the tendency to be organized, persistent, responsible, and dependable. Employees high in conscientiousness are dedicated to working and are more likely to put their effort into making work improvement and to be persistent in achieving work goals and overcome obstacles. Open employees have a strong tendency to explore unfamiliar and think differently. They have the preference for considering alternative ways to improve a situation. Agreeableness is represented by a tendency to be pleasant and compassionate in social interactions. People with a high level of agreeableness are sympathetic and cooperative. They tend to avoid interpersonal conflicts. This personality helps build and maintain social relationships. Neuroticism refers to the tendency to experience negative emotions. Neurotic employees have less self-confidence, and they are more likely to question themselves.

Regarding the above research gaps, I will introduce several theories to explain the importance of relative empirical explorations, including the theory of purposeful work behavior, person-environment fit theory, and meaningful work theory. These theories provide theoretical support for exploring the moderating role of individual personalities

First, the theory of purposeful work behavior integrates higher-order implicit goals with principles derived from the Five-Factor Model (FFM) of personality and the expanded job characteristics model to explain how traits and job characteristics jointly and interactively influence work outcomes. According to the theory, personality traits reflect an individual's

volition or motivational control (i.e., choices, preferences, wishes, and desires), and they influence behaviors that are generally consistent over situations and time and that distinguish individuals from each other. To achieve different fundamental goals at work (communion striving, status striving, autonomy/growth striving, and achievement striving), employees with different personalities interact with task and social characteristics and then experience work meaningfulness (Barrick, Li & Mount, 2013).

This theory specifies that two basic determinants – the employees' personality and the work context's social roles and task attributes – influence individuals' work motivations and behaviors jointly. Barrick and colleagues (2013) appealed for taking a comprehensive view of these two approaches, notably, their jointly and interactively influence on work motivations and behaviors. With this theory, I will explore how four social characteristics (involving social support, task interdependence, interaction outside the organization, and feedback from others) and their interactions with neuroticism personality facilitate different dimensions of job crafting behaviors in the empirical chapter.

Second, the Person-Environment (P-E) fit theory is based on the interactionist theory of behavior (Sekiguchi, 2004). The interactionist perspective proposes that behavior is a joint function of the person and the environment; neither the personal characteristics nor the context alone explains employees' work attitudes and behaviors. It is the interaction of personal and situational variables that plays the dominant role. According to Muchinsky and Monahan (1987), the definition of the P-E fit refers to the degree of congruence or match between individual and situational variables in producing work outcomes. Among various types of fit in P-E fit theory, person-organization fit (P-O fit) and person-job fit (P-J fit) are broadly defined and applied.

P-O fit is defined as the compatibility between individuals and organizations (Kristof, 1996). One of the operationalizations of P-O fit is the match between the characteristics of individual personalities and organizational climate (Sekiguchi, 2004). P–J fit focuses on the match between personal characteristics and job characteristics, which can be differentiated into demands–abilities (D–A) fit and needs– supplies (N–S) fit. D–A job fit perceptions refer primarily to judgments of congruence between the demands of a job and an employee's knowledge, skills, and abilities, whereas N–S job fit perceptions are concerned with the

congruence between an employee's needs or wants and supplies he or she receives from a job (e.g., Edwards, 1991; Kristof-Brown, 2000).

P-O fit and P-J fit is well known for explaining the joint effects of the person and the situation on employee attitudes and behaviors (Edwards, 1991, 2008; Kristof-Brown, Zimmerman, & Johnson, 2005). When the employee can't perceive a satisfactory P-O fit, the individual tends to alter personal behaviors, values, or beliefs to correspond to the situation, or the employee can change the organizational climate for personal preferences and needs. For P-J fit, when the job can't match the employee's personal needs, traits, abilities, or the employee's own knowledge, skills, competences can't fit the job requirement, the employees can take some initiatives, such as job crafting behaviors, to enhance P-J fit. I contend that the misfit between person and organization or job is the normal state. Employees need to balance their personal characteristics and their work context to make adjustments and achieve a satisfactory P-O fit or P-J fit. Thus, in my empirical chapters, job crafting is an adaptive behavior, resulting from the interaction effects of individuals' personalities and their social work characteristics.

Finally, the sources of meaningful work are identified from (1) individual characteristics, (2) job design characteristics, (3) social interactions on the job, and (4) person-job fit (Tims et al., 2016). Ensuring alignment between personal competencies, values, purpose, and the job can trigger meaningful work. Previous research has examined the relationship between JD-R job crafting and meaningful work. Tims and colleagues (2016) verified a significant indirect effect of job crafting on meaningfulness via demands-ability fit. Their study provided basic evidence of the relationship between job crafting and meaningfulness. However, the relationship between extensive and reductive job crafting and meaningful work is still not clear. Moreover, the moderating role of the Big Five personality is worthy of exploring as well.

**2.9 Summaries**

The present chapter provided an overview of the existing job crafting literature as well as introduced the neglected moderating role of Big Five personalities. I reviewed the conceptualization, types, forms, measurements, antecedents, outcomes, and moderators of job crafting. After summarizing the literature review, I proposed several research gaps and

questions. The insufficient understanding of the role of social context and the moderating role of Big Five personalities in job crafting limits the theoretical development of job crafting research. I then discussed several theories to support our following empirical studies. In the following chapters, I will conduct empirical studies to answer the mentioned research questions.

**Figure 1 The hypothesized model of the dissertation**
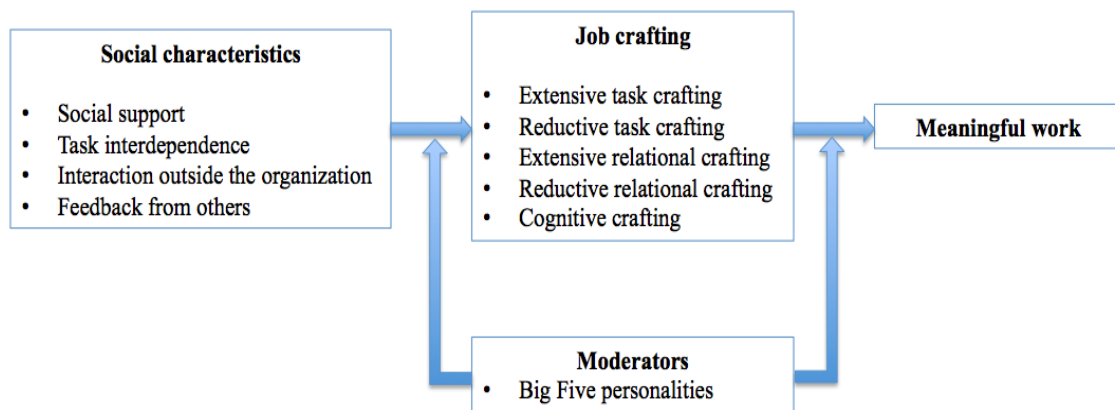
# CHAPTER 3 Unpacking the Predictive Effects of Social Characteristics on Job Crafting: The Moderating Role of Neuroticism

## 3.1 Introduction

As revealed in Chapter 2, regarding the empirical studies that explored job crafting antecedents, most research investigated the influence of individual differences, motivational characteristics, and job characteristics on employees' crafting behaviors. Studies that indicated the predictive effects of social characteristics are relatively limited. Work design researchers have acknowledged the need to investigate the impact of social context because it can shape employees' experience and behaviors. Scholars have indicated that interpersonal networks could enhance individuals' work opportunities, motivations, and resources. Also, the role of social relationships was essential for employees to experience their work as meaningful and important (Grant, 2007). Although organizational scholars have reported the effects of various leaderships on job crafting, workers' social context involves not only interpersonal relationships with leaders and managers, but also with colleagues, customers, patients, partners, and so on. In addition, the joint effects of social context and individual differences on employees' self-initiated behavior are not apparent either. Thus, one research question of this dissertation is, "How social characteristics predict task, relational, and cognitive crafting behaviors? And how do individual personalities influence the above relationships?" The study in this chapter was designed to answer this question.

The central purpose of this chapter is to investigate the relationships between social characteristics and job crafting and to explore the moderating role of neuroticism personality. In the following sections, I will examine the theoretical background of job crafting and interpret the magnitude of social characteristics and its joint effects with neuroticism. I hypothesize the possible prediction of each social characteristic and their interaction effect with neuroticism on specific job crafting dimensions. Research methods and results are described then. Limitations and future directions are suggested in the end.

## 3.2 Theoretical background

Previous researchers contended that it was managers' responsibility to design jobs as a set of tasks for employees to perform, and employees often taook personal initiatives to alter work boundaries (Butler & Waldroop, 1999; Ilgen & Hollenbeck, 1991). Earlier studies mainly focused on two broad approaches to address the antecedents of job crafting. The first approach includes personal attributes and individual differences. The second approach consists of job characteristics, especially task characteristics and knowledge characteristics (Wang et al., 2017a). However, the social characteristics of work are more critical than before. Researchers of work design have increasingly recognized that roles, tasks, and projects are embedded in the social context.

The present study highlights the importance of social characteristics' prediction on job crafting. First, jobs, roles, and tasks are more socially embedded than ever before because of the global economy shift from manufacturing economies to service and knowledge economies. Numerous technological and strategic changes, such as business mergers and acquisitions, as well as the introduction of matrix and network organizations, have altered the social structure of organizations. Most organizations use teams to complete tasks and projects, and the work interdependence increases significantly (Grant & Parker, 2009). Workgroups and teams require employees' cooperation beyond their boundaries. These changes in social context have a critical impact on shaping employees' experiences and behaviors. Second, according to the social information processing theory, job perceptions and attitudes are constructed by social cues (Salancik & Pfeffer, 1978). For example, positive interpersonal relationships enable employees to experience their jobs as meaningful (e.g., Wrzesniewski, Dutton, & Debebe, 2003).

In fact, in the literature of proactivity, there is emerging evidence that social context can influence proactive behaviors. Nonetheless, many studies on job crafting have ignored the predictive effects of relational context. It is unclear how social characteristics influence employees' decisions on job crafting.

Not only social context has an essential impact on individuals' job crafting behaviors, but

also its interaction effects with individual differences can explain why employees engage in job crafting. The theory of purposeful work behavior "integrates implicit goals with principles derived from the Five-Factor Model (FFM) of personality and the expanded job characteristics model to explain how traits and job characteristics jointly and interactively influence work outcomes" (Barrick et al., 2013, p. 132). According to the compatibility principle, broad predictors and behaviors must be matched at compatible levels of generality or aggregation to provide the most explanatory power. The theory of purposeful work behavior matches individual personalities and social characteristics to an equally broad aggregated personal goal, which in turn trigger employee effectiveness (Barrick et al., 2013).

The theory indicates that emotional stability, which has the motivational strivings of communion and achievement, is sensitive to all the four social characteristics  (i.e., social support, interdependence, interaction outside the organization, and feedback from others) and it may be the most suitable moderator because it can match with all the four social characteristics at a compatible level and can provide the most explanatory power to the engagement of job crafting behaviors.

Moreover, previous empirical research proposed inconsistent direct predictions of neuroticism on job crafting. These inconsistent relationships indicate that to enhance neurotic employees' proactivity, the interaction with environmental antecedents should be involved. Thus, in the following sections, the interaction of neuroticism and social context will be investigated.

### 3.3 Hypotheses development

Before designing and redesigning work, perhaps one of the most important targets revolves around understanding the structure of the work. The interpersonal and social aspects of work are viewed as essential and major aspects for work design. Previous researchers have investigated various typical social contexts. However, the employees' social or interpersonal aspect of work has been missing from job characteristics conceptualizations (Morgeson & Campion, 2003). Morgeson and Humphrey designed the Work Design Questionnaire (WDQ)

scale, which is a comprehensive measure for assessing work design and the nature of work. The WDQ represents an integration of over forty years of work design research into a single parsimonious measure (Morgeson & Humphrey, 2006). This measurement generalizes comprehensive aspects of employees' social and interpersonal environment, including four social characteristics, which are social support, interdependence, interaction outside the organization, and feedback from others.

By representing different aspects of employees' social context, the four social characteristics reflect the fact that employees' work is performed in a broader social environment. There are several additional social characteristics of work (e.g., interpersonal display rules for emotions, opportunities to benefit others and requirements to harm others; Grant & Parker, 2009). However, instead of focusing on one specific social occasion, exploring the influence of general and broad social context is the focus of the current dissertation. Moreover, investigating the four social characteristics systematically is helpful to make the model concise.

Thus, I systematically select the four social characteristics from Morgeson and Humphrey's (2006) work design framework, which involve social support, task interdependence, interaction outside the organization, and feedback from others, to test the influence of the broad social context on employees' job crafting behaviors.

### *Social support and job crafting*

Social support reflects the extent to which a job offers advice and assistance from others (e.g., supervisors and coworkers), and the friendship opportunities at work (Morgeson & Humphrey, 2006), which include emotional and instrumental forms (House, 1981).

Social support may facilitate task crafting, relational crafting, and cognitive crafting. First, social support from supervisors and coworkers helps employees recognize that self-initiated behaviors are valued and encouraged, and supporters can provide autonomy, freedom, and independence (Ohly & Schmitt, 2017) for such initiation. High social support often means information and resources, which may promote task completion (Golden & Gajendran, 2018). Developmental and supportive supervisory may also provide useful work feedback and

discussions on work challenges, which enable employees to reshape task boundaries (Leana et al., 2009). Second, as one motivation of job crafting is interpersonal connections, social support may provide opportunities for positive social connections, which can meet employees' needs of relatedness.

Third, social support also may facilitate cognitive crafting. When contacting other people in a supportive context, employees tend to perceive work meaningfulness. Wrzesniewski and colleagues (2013) proposed that real interaction or how employees understand their connections have the possibility to change work meanings. They indicated that the meaning of work is influenced by how employees experience their membership, communication, social cues, and contributions. Additionally, social support can satisfy the human's needs to belong (Bakker, 2010).

**Hypothesis 1**: *Social support is positively associated with (a) task job crafting, (b) relational job crafting, and (c) cognitive job crafting behaviors.*

### The interactive effect of neuroticism and social support on job crafting dimensions

I hypothesize that neuroticism moderates the relationship between social support and job crafting. Neuroticism is related to over-activity and emotional instability; neurotic employees tend to experience more negative affect (Eysenck, 1994). Employees with high neuroticism are more likely to feel less self-confidence for proactive changes. In the work context with high social support, supervisors and colleagues value and encourage neurotic employees' self-started work behaviors. Supporters tend to provide sufficient autonomy as well as work information and resources to promote neurotic employees' task completions and reduce their stress (Golden & Gajendran, 2018).

**Hypothesis 2:** *Neuroticism personality moderates the effect of social support on job crafting, such that neurotic employees are more likely to engage in task crafting behaviors under conditions of high social support than emotionally stable employees.*

*Task interdependence and job crafting*

Task interdependence is defined as the interconnectedness between jobs, that is, the performance of one job depends on the successful performance of the other (Kiggundu, 1981). I propose that task interdependence may predict task crafting. First, in high-interdependence jobs, employees are often required to work closely with colleagues and to spend time coordinating work activities frequently (Hertel, Konradt, & Orlikowski, 2004). High-interdependence work usually requires continuous task adjustment and modification based on others' inputs and real-time information exchange (Kiggundu, 1981). Employees may pay more attention to the effects of the time, consequences, and quality of personal tasks; social pressure may emerge with minimal efforts. Research has found that employees would make more efforts if they felt that their poor performance might inhibit the work of others (e.g., Hertel et al., 2004).

Second, task interdependence may be motivating (Hertel et al., 2004) and may improve employees' active work engagement by nurturing individuals' responsibility sense and interpersonal trust. According to Pearce and Gregersen (1991), reciprocal interdependence could cultivate a high level of felt responsibility and promote extra-role helping and citizenship behaviors. Besides, task interdependence may result in better task-related communications and transformations of tacit job knowledge (Berman, Down, & Hill, 2002), and in turn, improve work performance (Humphrey, Nahrgang, & Morgeson, 2007; Saavedra, Earley, & Van Dyne, 1993).

**Hypothesis 3:** *Task interdependence is positively associated with task job crafting behaviors.*

*The interactive effect of neuroticism and interdependence on job crafting dimensions*

I expect that neuroticism will moderate the relationship between task interdependence and task crafting. First, according to Barrick and colleagues (2013), emotional stability (low neuroticism) is strongly related to striving for communion. In other words, employees with high neuroticism tend to enjoy the work climate with high independence instead of interdependence.

With high interdependence, neurotic employees may spend more time on communication and negotiation to initiate task changes, which might make them feel uncomfortable.

Second, when the work climate includes high interdependence, employees' job activities are more likely to affect (or be affected by) others' work. Neurotic employees tend to avoid negative influence on colleagues' work. They may worry about their competence and feel much more depression and stress. It is more likely for them to be obsessed with passive moods. Therefore, neurotic employees are less likely to change task boundaries because task crafting often means uncertain work results and uncomfortable negotiation.

*Hypothesis 4: Neuroticism personality moderates the effect of task interdependence on task crafting, such that neurotic employees are less likely to engage in task crafting behaviors under conditions of high task interdependence than emotionally stable employees.*

### Interaction outside organizations and job crafting

Interaction outside the organization refers to the extent to which the job requires employees' interactions and communications with individuals outside the organization, such as suppliers, customers, distributors or any other external entity (Morgeson & Humphrey, 2006). I contend that interaction outside the organization may promote relational crafting. First, interactions outside the organization may motivate employees to be more pro-social (Goštautaitė & Bučiūnienė, 2015). Grant (2007) found that if organizations provided opportunities to contact beneficiaries, employees could perceive strong affective commitments. These affective commitments, along with an awareness of the influence on beneficiaries, will strengthen employees' pro-social motivations and encourage their efforts, persistence, and helping behaviors. Second, meaningful connections may promote employees' confidence in social skills and motivate them to expand their social network. Employees are more likely to customize relationships to serve specific beneficiaries and reprimand or dismiss unpleasant beneficiaries (Grant, Campbell, Chen, Cottone, Lapedis, & Lee, 2007).

**Hypothesis 5:** *Interaction outside organizations is positively associated with relational job crafting behaviors.*

### The interactive effect of neuroticism and interaction outside the organization on job crafting

Neuroticism may have a moderation effect on the positive relationship between interaction outside the organization and relational crafting. First, interaction outside the organization requires neurotic employees to spend a great deal of time with others, which can motivate them to be more pro-social. And interaction outside the organization may provide neurotic employees with more opportunities to extend their relationship boundaries. Second, high interaction outside the organization may help emotionally unstable employees improve their communication skills and social skill. These social skills are beneficial for neurotic incumbents to make friends and know other people well.

**Hypothesis 6:** *Neuroticism personality moderates the effect of interaction outside the organization on relational job crafting, such that neurotic employees are more likely to engage in relational crafting behaviors under conditions of high interaction outside the organization than emotionally stable employees.*

### Feedback from others and job crafting

Feedback from others is defined as the extent to which others inside the organization provide information about job performance; two primary sources of feedback from others are supervisors and coworkers (Morgeson & Humphrey, 2006). Nowadays, employees prefer to give more heed to interpersonal feedback to match their performance goal (e.g., Mayer, Ehrhart, & Schneider, 2009) and interpret personal performance.

Feedback from others may facilitate all three job crafting dimensions. First, performance

feedback from others may provide the knowledge of task results in a timely and continuous manner. With apparent objective effectiveness (e.g., quality and quantity) information, employees may do better work adjustments and changes. Moreover, performance feedback from others might enhance the employees' self-efficacy and competence by providing evidence of individuals' enactive mastery (Liden, Wayne, & Sparrowe, 2000). Second, relational crafting may also benefit from feedback from supervisors and colleagues because such valuable performance feedback may increase interpersonal trust and help employees to build or improve workplace relations. Third, receiving feedback on performance from others tends to be meaningful experiences for most employees (Hackman & Oldham, 1976), with which individuals might change their understanding of tasks or the whole job. Moreover, interpersonal sense-making processes inform the meaning of work (Wrzesniewski et al., 2003).

*Hypothesis 7: Feedback from others is positively associated with (a) task job crafting, (b) relational job crafting behaviors, and (c) cognitive job crafting behaviors.*

### *The interactive effect of neuroticism and feedback from others on job crafting dimensions*

Neuroticism may be a potential moderator between feedback from others and task crafting. First, according to Barrick and colleagues (2013), individuals with high neuroticism tend to see themselves as less worthy and less satisfactory. They may feel less self-confidence and have a tendency to avoid failures. When supervisors and colleagues provide performance feedback and effectiveness information, emotionally unstable employees may know organizational expectations and their performance clearly. However, in such cases, neurotic people tend to be frequently distracted by anxiety, worries, and stress; they are more likely to be obsessed with details (Barrick, Stewart, & Piotrowski, 2002). Neurotic employees might potentially detract from rather than enhance their performance. Thus, emotionally unstable individuals may initiate fewer task changes.

*Hypothesis 8: Neuroticism personality moderates the effect of feedback from others on*

*task crafting, such that neurotic employees are less likely to engage in task crafting behaviors under conditions of high feedback from others than emotionally stable employees.*

**Figure 2 The hypothesized model in Chapter 3**
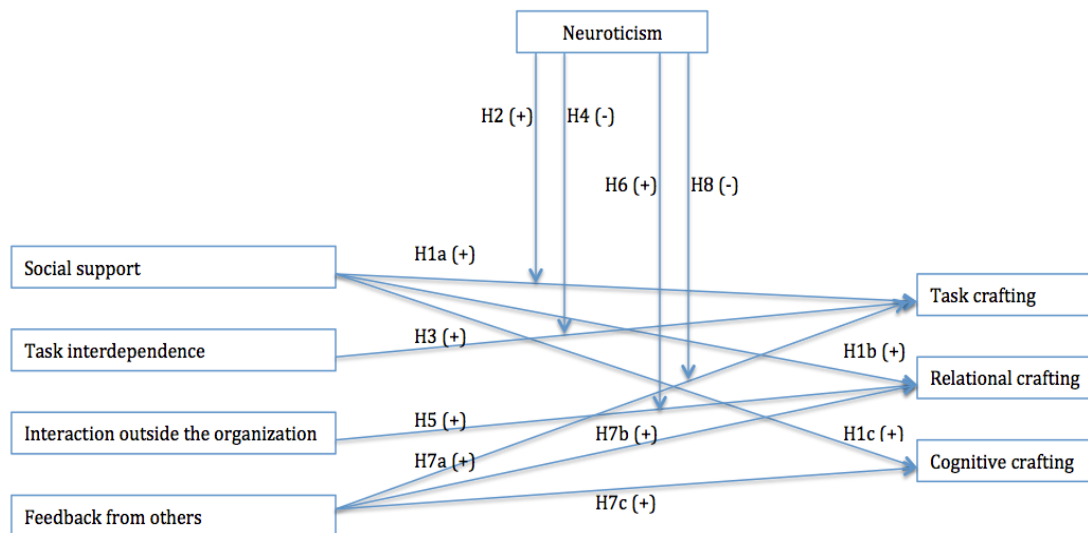


### 3.4 Method

#### *Sample and procedures*

Data were collected through an online survey company in Japan. Before the survey, the standard translation-back-translation procedure was used to translate job crafting and social characteristics items to a Japanese version (cf. Brislin, 1970). All the responses of independent variables except demographic variables were measured by a seven-point Likert scale (1 = *strongly disagree*, 7 = s*trongly agree*). First, a screening survey was conducted to make a pool, which only composed of Japanese full-time employed people. Demographic information was collected in this survey. The pool included 4,014 participants.

Then, a three-wave survey was conducted. In the first wave, demographic variables and neuroticism were assessed. The scale from a short form of the Big Five developed by Namikawa,

Tani, Wakita, Kumgai, Nakane, and Noguchi (2012) was used. The research company distributed the first wave questionnaire to 1,254 full-time employees and received 670 responses. A month later, the social characteristics items were assessed. I received 451 valid responses. After a month, the data on job crafting were collected from the second-wave respondents. I received 298 feasible responses from this survey. Respondents who had changed jobs or altered work positions from the deadline of the screening survey to the deadline of the third survey were excluded, resulting in a sample size of 253. The questionnaires were anonymous, and participation was voluntary.

73.9% of the overall valid respondents were male, and the average age was 40.63 years ($SD$ = 9.5). The average tenure of valid participants is 12.81 years, and 21.7% of them are managers. 43.9% work in large companies (exceeds 1,000 employees). Participants were from diverse industries, including manufacturing and construction (37.9%), services and real estate (18.6%), information and communication (8.7%), retail and wholesale (7.9%), transportation, electricity and gas (6.7%), finance and insurance (4.0%), medical and welfare (2.0%), education (0.8%), and other industries (13.4%).

### Measures

**Job crafting behaviors.** Job crafting was assessed by using Slemp and Vella-Brodrick's (2013) 15-item scale. Three job crafting dimensions are measured and assessed by five items each. Task crafting items asks respondents whether they can introduce new work approaches, change task scope and type, and take additional tasks. Relational crafting was assessed to find out whether employees make efforts to know others and to build relationships. Cognitive crafting was assessed by exploring the extent to which employees recognize, consider, and change their life purpose, work significance, and overall well-being. Cronbach's alpha for each dimension was .85, .85, and .88, respectively.

**Social characteristics.** I used the social characteristics scale developed by Morgeson and Humphrey (2006). The social support measure is comprised of three items and assesses the extent to which employees feel that their supervisors and colleagues are supportive, friendly, and concerned about their welfare. The four-item scale of task interdependence measures the

extent to which the employee's work is linked to others' work. The interaction outside the organization measure includes three questions and asks respondents to assess if the job requires them to communicate and interact with people outside their organizations. The feedback from others measure included three items, which ask respondents to evaluate if they receive information about personal performance from others in their organization. Cronbach's alpha for each scale was .74, .78, .77, and .81 respectively.

***Neuroticism.*** Neuroticism is assessed by using five items from a short form of Big Five scale developed by Namikawa and colleagues (2012). In the current sample, the neuroticism personality yields an internal consistency reliability of .89.

***Control variables.*** I included gender, age, tenure, and rank as control variables. Dummy variables were created for gender (1 = Male; 0 = Female) and rank (1 = managers; 0 = non-managers) to distinguish different groups.

## 3.5 Results

Confirmatory factor analysis (CFA) was conducted using the R (Version 3.4.4) to assess the quality of survey measures. Table 1 presents the results of the CFA. The hypothesized eight-factor model has the best fit (RMSEA = .06; SRMR = .06, TLI = .89, CFI = .90). Table 2 presents the means, standard deviations, and correlations of the study variables.

Hierarchical regression analysis was calculated by R to test the hypotheses. The results reported here include control variables. Model 1 involves control variables and independent variables. Model 2 includes the control variables, independent variables, and interaction effects (see Table 3).

Hypothesis 1 predicted that social support would be positively associated with all three job crafting dimensions. According to Table 3 (Model 1), the results indicate that social support is positively related to task crafting ($\beta = 0.23$, $p < 0.01$), relational crafting ($\beta = 0.28$, $p < 0.001$), and cognitive crafting ($\beta = 0.22$, $p < 0.01$). Hypothesis 1 is supported. In Hypothesis 2, I predicted that neuroticism would moderate the relationship between social support and task crafting. The results in Table 3 (model 2) supported this hypothesis ($\beta = 0.24$, $p < 0.01$). Figure

1a indicated social support was positively related to task crafting for those high in neuroticism.

Table 4 Results of Confirmatory Factor Analyses

| Models | $X^2$ | df | p-value | CFI | TLI | RMSEA | SRMR |
|---|---|---|---|---|---|---|---|
| 1. Hypothesized eight-factor model | 895.61 | 467 | <.001 | 0.90 | 0.89 | 0.06 | 0.06 |
| 2. Five-factor model (combining four social characteristics into a single factor) | 1179.80 | 485 | <.001 | 0.84 | 0.83 | 0.08 | 0.07 |
| 3. Three-factor model (combining four social characteristics into a single factor and three job crafting dimensions into another single factor) | 1487.36 | 492 | <.001 | 0.77 | 0.75 | 0.09 | 0.08 |
| 4. One-factor model | 2654.86 | 495 | <.001 | 0.50 | 0.47 | 0.13 | 0.13 |

*Note. N* = 253.

Hypothesis 3 predicted that task interdependence would promote task crafting. The results in Table 3 (Model 1) supported this hypothesis ($\beta$ = 0.19, $p$ < 0.01). However, neuroticism is not a significant moderator between task interdependence and task crafting ($\beta$ = 0.04, $p$ = n.s.; Table 3 (Model 2)). Hypothesis 4 is not supported.

Table 5 Descriptive statistics and correlations among variables in chapter 3

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Gender | 0.74 | 0.44 | — | | | | | | | | | | | |
| 2. Age | 40.63 | 9.53 | 0.35*** | — | | | | | | | | | | |
| 3. Tenure | 12.81 | 8.38 | 0.26*** | 0.62*** | — | | | | | | | | | |
| 4. Rank | 0.22 | 0.41 | 0.16* | 0.33*** | 0.23*** | — | | | | | | | | |
| 5. Social support | 4.31 | 1.00 | 0.03 | 0.05 | 0.03 | 0.09 | (0.74) | | | | | | | |
| 6. Interdependence | 4.21 | 1.04 | 0.11 | 0.12 | 0.07 | 0.16* | 0.42*** | (0.78) | | | | | | |
| 7. Interaction outside the organization | 4.20 | 1.23 | 0.17** | 0.05 | 0.01 | 0.20** | 0.37*** | 0.49*** | (0.77) | | | | | |
| 8. Feedback from others | 4.21 | 1.09 | 0.05 | 0.04 | -0.03 | 0.14* | 0.56*** | 0.47*** | 0.48*** | (0.81) | | | | |
| 9. Neuroticism | 4.50 | 1.14 | -0.14* | -0.12 | -0.11 | -0.12 | -0.03 | 0.03 | -0.02 | -0.02 | (0.89) | | | |
| 10. Task crafting | 4.32 | 0.96 | -0.06 | -0.02 | 0.02 | 0.13* | 0.35*** | 0.33*** | 0.25*** | 0.28*** | -0.01 | (0.85) | | |
| 11. Relational crafting | 3.96 | 1.12 | -0.01 | -0.11 | -0.07 | 0.03 | 0.50*** | 0.32*** | 0.45*** | 0.50*** | -0.07 | 0.54*** | (0.85) | |
| 12. Cognitive crafting | 4.25 | 1.06 | -0.05 | -0.04 | -0.01 | 0.09 | 0.40*** | 0.32*** | 0.30*** | 0.39*** | -0.10 | 0.72*** | 0.64*** | (0.88) |

*Note.* $N = 253$. Alpha reliabilities are presented in parenthesis.

Gender: 1 = male; 0 = female. Rank: 1= managers; 0 = non-managers.

*p < .05; **p < .01; ***p < .001.

Table 6 Hierarchical regression results in chapter 3

| | Model 1 | | | | | | | | | Model 2 | | | | | | | | |
| | Task crafting | | | Relational crafting | | | Cognitive crafting | | | Task crafting | | | Relational crafting | | | Cognitive crafting | | |
| | β | SE | *p*-value | β | SE | *p*-value | β | SE | *p*-value | β | SE | *p*-value | β | SE | *p*-value | β | SE | *p*-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (Intercept) | 0.00 | 0.06 | 1.00 | 0.00 | 0.05 | 1.00 | 0.00 | 0.06 | 1.00 | 0.00 | 0.06 | 0.96 | 0.00 | 0.05 | 0.95 | 0.00 | 0.06 | 0.97 |
| Gender | -0.11 | 0.06 | 0.09 | -0.04 | 0.06 | 0.53 | -0.09 | 0.06 | 0.14 | -0.13* | 0.06 | 0.05 | -0.04 | 0.06 | 0.51 | -0.10 | 0.06 | 0.12 |
| Age | -0.08 | 0.08 | 0.28 | -0.15* | 0.07 | 0.03 | -0.09 | 0.08 | 0.26 | -0.09 | 0.08 | 0.23 | -0.15* | 0.07 | 0.02 | -0.09 | 0.08 | 0.24 |
| Tenure | 0.05 | 0.07 | 0.47 | 0.03 | 0.06 | 0.66 | 0.04 | 0.07 | 0.62 | 0.09 | 0.07 | 0.22 | 0.04 | 0.06 | 0.53 | 0.05 | 0.07 | 0.49 |
| Rank | 0.10 | 0.06 | 0.11 | -0.04 | 0.05 | 0.44 | 0.03 | 0.06 | 0.57 | 0.10 | 0.06 | 0.10 | -0.04 | 0.05 | 0.43 | 0.03 | 0.06 | 0.59 |
| Independent variables | | | | | | | | | | | | | | | | | | |
| Social support | 0.23** | 0.07 | 0.00 | 0.28*** | 0.06 | 0.00 | 0.22** | 0.07 | 0.00 | 0.18* | 0.07 | 0.01 | 0.26*** | 0.06 | 0.00 | 0.20** | 0.07 | 0.01 |
| Interdependence | 0.19** | 0.07 | 0.01 | -0.01 | 0.06 | 0.84 | 0.12 | 0.07 | 0.08 | 0.17* | 0.07 | 0.02 | -0.04 | 0.06 | 0.00 | 0.11 | 0.07 | 0.12 |
| Interaction outside organizations | 0.06 | 0.07 | 0.43 | 0.25*** | 0.06 | 0.00 | 0.09 | 0.07 | 0.22 | 0.06 | 0.07 | 0.43 | 0.25*** | 0.06 | 0.00 | 0.09 | 0.07 | 0.22 |
| Feedback from others | 0.03 | 0.08 | 0.75 | 0.24*** | 0.07 | 0.00 | 0.17* | 0.07 | 0.02 | 0.04 | 0.08 | 0.59 | 0.27*** | 0.07 | 0.00 | 0.18* | 0.08 | 0.02 |

| | B | SE | p | B | SE | p | B | SE | p | B | SE | p | B | SE | p | B | SE | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Neuroticism | -0.01 | 0.06 | 0.85 | -0.08 | 0.05 | 0.11 | -0.11 | 0.06 | 0.06 | -0.02 | 0.06 | 0.71 | -0.11* | 0.05 | 0.04 | -0.12 | 0.06 | 0.05 |
| Interaction effects | | | | | | | | | | | | | | | | | | |
| SS x Neuroticism | | | | | | | | | | 0.24** | 0.07 | 0.00 | -0.12 | 0.06 | 0.07 | -0.11 | 0.07 | 0.14 |
| INT x Neuroticism | | | | | | | | | | 0.04 | 0.06 | 0.49 | -0.02 | 0.05 | 0.71 | -0.01 | 0.06 | 0.92 |
| IOO x Neuroticism | | | | | | | | | | 0.01 | 0.06 | 0.88 | 0.11* | 0.06 | 0.05 | -0.02 | 0.06 | 0.74 |
| FFO x Neuroticism | | | | | | | | | | -0.21** | 0.07 | 0.00 | -0.10 | 0.06 | 0.10 | -0.08 | 0.07 | 0.20 |
| Multiple R-squared | 0.19 | | | 0.39 | | | 0.24 | | | 0.23 | | | 0.42 | | | 0.25 | | |
| Adjusted R-squared | 0.16 | | | 0.37 | | | 0.21 | | | 0.19 | | | 0.39 | | | 0.21 | | |
| ΔR2 | 0.03 | | | 0.02 | | | 0.03 | | | 0.04 | | | 0.03 | | | 0.04 | | |
| F | 6.25 | | | 17.45 | | | 8.39 | | | 5.58 | | | 13.28 | | | 6.01 | | |

I expected a positive association between interaction outside the organization and relational crafting in Hypothesis 5. The results in Table 3 (model 1) supported the prediction ($\beta$ = 0.25, $p < 0.001$). Hypothesis 6 predicted that the interaction effect between interaction outside the organization and neuroticism is positively related to relational crafting. According to Table 3 (Model 2), this hypothesis is supported as well ($\beta$ = 0.11, $p < 0.05$). Figure 1b indicated that employees with high neuroticism tend to engage in more relational crafting when they perceive high interactions outside the organization.

Hypothesis 7 predicted that feedback from others would be positively related to task crafting, relational crafting, and cognitive crafting. According to Table 3 (model 1), Hypothesis 7b ($\beta$ = 0.24, $p < 0.001$) and hypothesis 7c ($\beta$ = 0.17, $p < 0.05$) are supported. However, feedback from others is not associated with task crafting ($\beta$ = 0.03, $p$ = n.s.). Thus, Hypothesis 7 is partially supported. In Hypothesis 8, I expected a negative relationship between feedback from others and task crafting for neurotic employees. The results in model 2 (Table 3) showed supports ($\beta$ = -0.21, $p < 0.01$). Figure 1c presents the plot for the interaction. While feedback from others had a positive relationship with task crafting and the relationship was more remarkable for employees with low neuroticism, while the moderation effect between feedbacks from others and high neuroticism is not significant.

Besides, neuroticism had no significant association with job crafting behaviors.

**Figure 3 Interactive effects of social characteristics and neuroticism on job crafting**
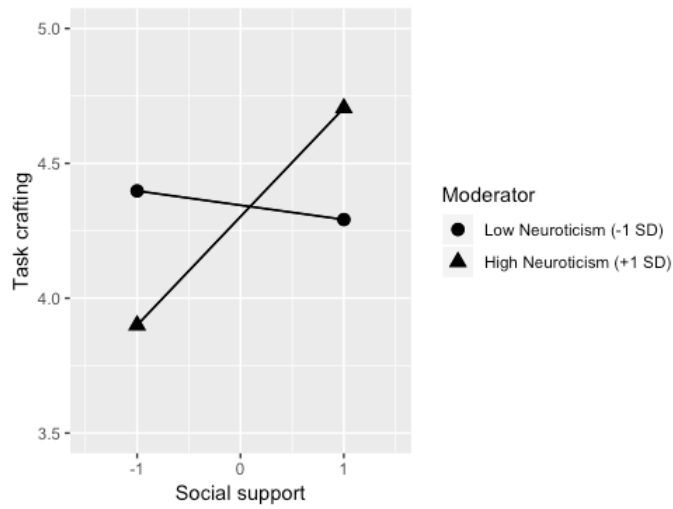


(a)  Interactive effects of social support and neuroticism on task crafting
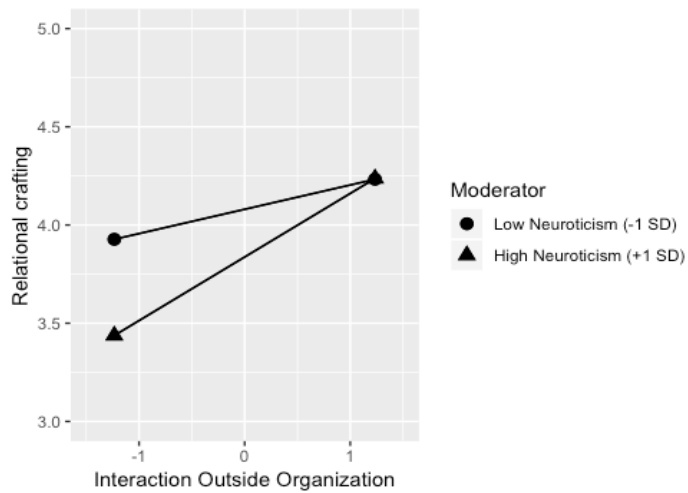


(b) Interactive effects of interaction outside the organization and neuroticism on relational crafting



(c) Interactive effects of feedback from others and neuroticism on task crafting

**3.6 Discussion**

I developed a model that proposed four social characteristics as antecedents of job crafting and neuroticism as a moderator of the relationships. Generally, empirical findings supported the predictions that all four social characteristics showed predictions on specific job crafting dimensions, and neuroticism strengthened the relationship between social support and task crafting an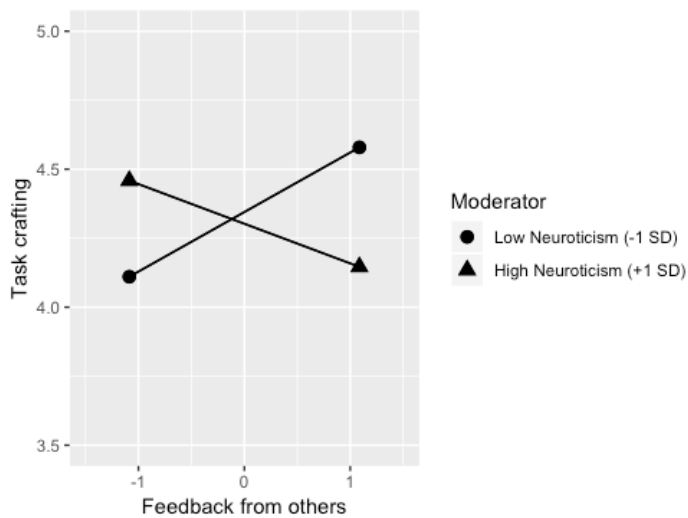d the relationship between interaction outside the organization and relational crafting but weakened the relationship between feedback from others and task crafting. However, these results indicate some differences with our hypotheses.

First, there is no association between feedback from others and task crafting. Feedback from others arises from the social context, rather than from the task itself. The work, instead of the social environment, always provides essential job information (Morgeson & Humphrey, 2008). I contend that feedback from the job may have potential moderation effects on the relationship between feedback from others and task crafting.

Second, neuroticism has no significant moderation with all social characteristics on cognitive crafting. The possible cause may be the features of neuroticism. Neurotic employees tend to experience more negative emotions and are more likely to focus on task completion instead of work meanings. Third, the current study did not find a significant interaction effect between interdependence and neuroticism on task crafting. From the perspective of the individual, neurotic employees tend to engage in task crafting to achieve task completion; however, from the perspective of the group, they are less likely to change task boundaries to avoid bad influence on colleagues' work.

**Figure 4 The results of the hypothesized model in chapter 3**
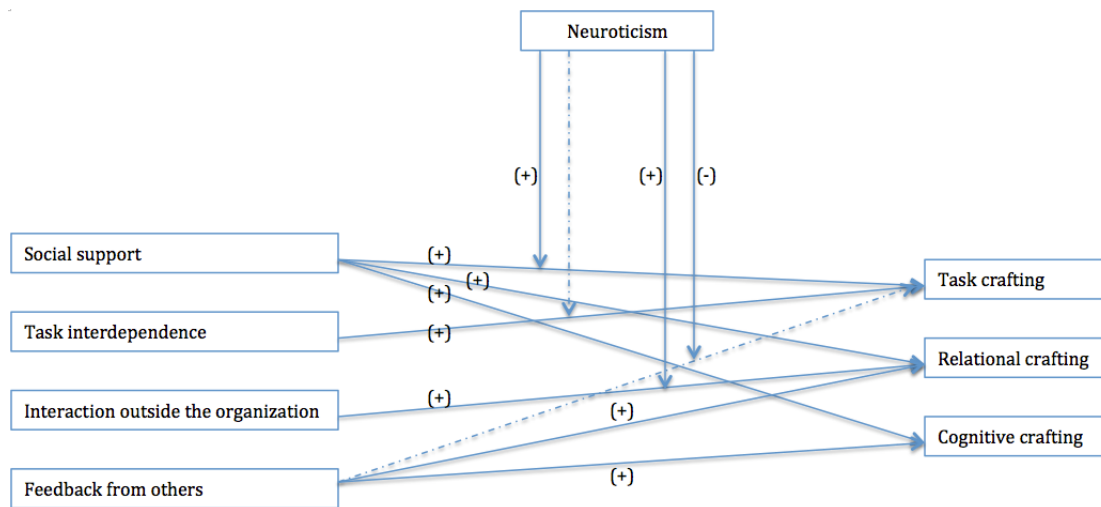


*Theoretical contributions*

These findings make significant theoretical contributions to both work design and job crafting literature. First, as Grant and Parker (2009) suggested, social context is one of the most promising streams of investigation. The present study responds to their calls by providing empirical evidence of the influence of social context on employees' job redesign behaviors systematically. As mentioned earlier, previous findings mainly focused on the perspective of individual attributes and task-related predictors of job crafting. One of the primary purposes of the current study is to examine the effects of four social characteristics on individuals' job crafting behaviors, including social support, task interdependence, interaction outside the organization, and feedback from others. Our findings offer the significant potential to enrich our insights by extending the scope of predictors of job crafting to contextual factors, especially interpersonal context factors.

Especially, Wrzesniewski and Dutton (2001) emphasized that task interdependence might have negative effects on employees' job crafting behaviors because it might provide more constraints and less freedom to alter task and relational boundaries. They believed that employees who engaged in work tasks with a high degree of interdependence were yoked strongly to timing and tasks of others. In such situations, employees were restricted from changing their work tasks and interpersonal relationships. However, according to the empirical

results in this chapter, task interdependence has a positive prediction on workers' task crafting behaviors, which provides totally different results to Wrzesniewski and Dutton's predictions. The possible reason for such a positive relationship may be that during the process of work coordination, workers may shape each others' tasks in tacit or explicit ways (Wittenbaum & Stasser, 1996). Employees may see others' attempts to craft the task in positive ways and, in turn, engage in similar behaviors (Moscovici, 1985; Worline, Wrzesniewski, & Rafaeli, 2002). Moreover, task interdependence may activate employees' proactive work engagement by nurturing their responsibility sense and interpersonal trust (Hertel et al., 2004).

Second, I aimed to advance the field of job crafting research by highlighting the interaction effect between social context and individual differences. Social context can help neurotic employees overcome their negative dispositions and stimulate their self-initiatives. For example, when organizations and managers provide a high level of social support, neurotic employees tend to engage in more task crafting behaviors. Similarly, individuals with high neuroticism prefer to improve the quality and quantity of their interpersonal relationships when they have more opportunities to interact with people outside of their organizations. However, the present study illuminates a potential downside of the feedback from others construct for neurotic individuals. In other words, neurotic employees are not willing to extend the scope or improve the quality of their work tasks when they receive feedback from others. Future research should seek to identify the motivation of which personality may be fueled by feedback from others. Finally, the study provides significant recommendations to organizations and managers. Managers can design jobs with relevant social characteristics to increase the proactivity of their employees.

### *Practical implications*

The present study also contributes to managerial practices. First, managers could facilitate employees' task crafting by encouraging social support and increasing interdependence. However, for employees with high neuroticism, providing sufficient feedback from others might lead to fewer interpersonal communications and suppress their task crafting behaviors.

Second, organizations and managers should offer more effective social support, feedback

from others, and interaction outside the organization to followers to encourage their relational crafting. These social characteristics help employees improve interpersonal relations and build a healthy interpersonal context. Third, organizations could facilitate social support and feedback from others to increase employees' work meaningfulness and identification. However, except for social characteristics, managers should also consider individual personality at the same time.

### *Limitations and future research*

The conclusions of the present study should be considered with certain limitations. First, self-reported measures were used, which might have potential common method variance (CMV). However, after examination, CMV between variables is not necessarily an issue. Moreover, the data were gathered at different time points (Podsakoff P. M., MacKenzie, Lee, & Podsakoff N. P., 2003). It is not reasonable to measure such constructs (i.e., job crafting) by using other-reported methods because cognitive crafting is a cognitive deliberation process, which is complicated for others to observe (Wrzesniewski & Dutton, 2001). Second, our data was collected in one specific (Japan) culture; the generalizability of the findings across different cultures is not clear. Future research should replicate this study within other cultures. Third, longitudinal research is needed to examine whether the predictive effect of social characteristics, as well as their interaction effects with neuroticism, on job crafting may change over time.

Finally, I involved only one personality (neuroticism) among Big Five personalities; One can also argue that agreeableness as well as emotional stability might have interacting effects with social support, interdependence, and interaction outside the organization, and in turn influence employees job crafting behaviors. Also, conscientiousness might be a possible moderator between feedback from others and job crafting. Thus, the picture of how job crafting will generalize in different social context with different personalities is mixed and complicated. The current dissertation provides empirical evidence for one of the all possibilities. Other possibilities should be investigated in the future. For example, researchers could explore the interaction effects of other individual attributes and characters, like the other four personalities from Big Five and social factors.

Future research could extend the existing conceptual framework and findings. First, the present study only addressed four social characteristics as antecedents of job crafting. The influence of social context may involve other aspects, such as pro-social work environment. Future research should include such type of social influence on job crafting. In addition, future research could investigate other work design categories, such as knowledge characteristics, to gain a completed framework. The interaction effect of individual attributes and contextual antecedents should not be neglected. Second, the present study investigated the scale of job crafting from an extensive perspective. Future research could explore job crafting from the reductive or preventive perspective. Finally, job crafting also has the potential of negativity or harm organizational effectiveness because it is not necessarily good or bad for organizations (Wrzesniewski & Dutton, 2001) but is sure to fit personal needs. Future research could explore how to align job crafting with organizational goals by changing the social context.

# CHAPTER 4 Linking Extending and Reducing Job Crafting to

# Meaningful Work: The Moderation Effects of Personalities

## 4. 1 Introduction

As one of the most valuable and significant work features for the majority of professionals (Cascio, 2003), meaningful work has become an essential means by which to improve employees' work engagement and retain talent (Lysova, Allan, Dik, Duffy, & Steger, 2019). People who perceive their work as meaningful report greater job satisfaction, better psychological adjustment (Steger, Dik, & Duffy, 2012), and greater well being (Arnold et al., 2007). Researchers have acknowledged the magnitude to explore the influence of employees' job crafting behaviors on meaningful work (Wrzesniewski & Dutton, 2001; Wrzesniewski et al., 2003; Wrzesniewski et al., 2013). When changing task and relational boundaries and engaging in cognitive crafting, employees fit their work to their personal preferences and values and find different work meanings.

According to the literature review chapter (Chapter 2), previous organizational scholars have already investigated meaningful work or work meaningfulness as job crafting outcomes (i.e., Nagy et al., 2019; Tims et al., 2016; Vermoonten, Boonzaier, & Kidd, 2019). However, all these empirical studies applied the JD-R job crafting conceptualization. The associations between task, relational, cognitive crafting, and meaningful work are not clear. Moreover, individual differences such as Big Five personality traits might have moderation effects on the relationships between job crafting behaviors and meaningful work because employees are the principal subjects enacting self-started behaviors. Thus, the second research question proposed in Chapter 2 is "How extensive and reductive job crafting dimensions trigger meaningful work? And how Big Five personalities moderate these relationships?" To make up for the research gap, I designed the current study.

The purpose of this chapter is to explore the impact of extensive and reductive job crafting behaviors on meaningful work as well as the moderating role of Big Five personalities. In the

following sections, theoretical backgrounds for job crafting and meaningful work will be introduced first. Next, I will interpret the relationship between job crafting and meaningful work and explain why each job crafting dimension can facilitate a sense of meaningfulness. Subsequently, I will make predictions on how personalities moderate the relationships between job crating dimensions and meaningful work. Then I will describe the research methods and summarize the results. In the last section, discussions, limitations, and future research directions for future research will be outlined.

## 4.2 Job crafting

In modern, dynamic, and global organizations, interest in a proactive orientation has recently emerged (Den Hartog & Belschak, 2007). Organizations require employees' proactive solutions to meet stable, long-term objectives in transient and unpredictable environments (Thomas, Whitman, & Viswesvaran, 2010). Among various self-initiated behaviors, job crafting has become one of the principal conceptualizations (Grant & Parker, 2009).

In this study, Weseler and Niessen's (2016) job crafting scale based on Wrzesniewski and Dutton's (2001) original conception was applied to investigate how changes to work tasks, relations, and cognitions influence employees' sense of meaningful work. I adopted this extensive and reductive job scale for the following reasons. First, the concept of job crafting based on the JD–R model did not address cognitive crafting and the reducing aspects thereof. According to Wrzesniewski and Dutton (2001), employees can choose to do fewer, more, or different tasks in their formal work to create a different job. Thus, reducing job crafting behaviors is also an indispensable form of job crafting. I believe that appropriate reducing crafting behaviors may increase work efficiency and decrease work time and cost. Cognitive crafting behaviors are also an essential dimension of job crafting. Changing the view of the job fundamentally changes how employees approach and experience it. Thus, I adopted Weseler and Niessen's scale to include reducing job crafting dimensions and cognitive crafting. Second, although a negative relationship is reported between reducing job crafting behaviors and task performance (Weseler & Niessen, 2016), little research has been conducted on reductive job

crafting, possibly because this was not a key area of concern.

Previous research indicated the impact of job crafting on many positive work behaviors, suggesting that job crafting matters for various key individual and organizational outcomes (Wrzesniewski et al., 2013). However, most studies revealing the relationship between job crafting and meaningful work are theoretical. To our knowledge, only few studies provide empirical evidence of meaningful work as an outcome of job crafting.

## 4.3 Meaningful work

Most employees value meaningfulness as the most significant and prominent feature of work (Cascio, 2003). The meaning of work occupies in the central position of employees' experience of their jobs (Wrzesniewski et al., 2013), as work has become a vital component of life and a prominent way of personal fulfillment. Organizations and scholars highly regard meaningful work because it can satisfy employees' internal motives (Chalofsky & Krishna, 2009).

Previous researchers distinguish between the terms "meaningfulness" and "meanings." The term "meanings" refers to individuals' perceptions or interpretations of their environmental elements, which are related to a cognitive meaning-making process through which employees can understand their experiences (Wrzesniewski et al., 2003). Pratt and Ashforth (2003) distinguished between meaningfulness *in* work and meaningfulness *at* work. Meaningfulness in work stands for meanings that arise from what the employee does (i.e., one's work role), while meaningfulness at work refers to meanings that come from being a part of something bigger (i.e., ones' membership in a community or culture). Lepisto and Pratt (2017) presumed that meanings have positive, negative, or neutral valence. In comparison, Rosso and colleagues (2010) defined meaningfulness as "work experienced as particularly significant and holding more positive meaning for individuals" (p. 95), which is significant for individuals and has positive valence (Lysova et al., 2019). Following Rosso and colleagues (2010), Steger and colleagues (2012) proposed that meaningful work integrates the concepts of "meanings" and "meaningfulness," which is a eudaimonic focus (growth- and purpose-oriented), rather than

hedonic focus (pleasure-oriented). The present study adopts the concept of meaningful work developed by Steger and colleagues (2012).

Steger and colleagues (2012) conceptualized three facets of meaningful work: (1) psychological meaningfulness in work, which refers to significant and meaningful work experience; (2) meaning-making through work, which means that meaningful work makes the whole life more meaningful and significant; and (3) greater good motivations, which imply that work has most meaning when it positively affects others.

Lysova and colleagues (2019) reported that meaningful work is influenced by factors at the individual, job, organizational, and societal levels. Individual predictors of meaningful work include dispositional factors (e.g., Big Five personalities, positive affective disposition), characteristic adaptations (e.g., intrinsic motivation), and personal narratives (e.g., shared experience). Job level factors include the type, quality, and amount of work, as well as job design (including job crafting). Organizational factors can also predict meaningful work, such as leadership, organizational culture, and the social work context (e.g., good workplace relationships). Societal factors such as access to decent work and cultural norms can also affect meaningful work.

### 4.4 Job crafting and meaningful work

In the existing literature, the association between job crafting and meaningful work is less prevalent and less often studied. Researchers suppose that meaningful work derives not only from job characteristics, but also from employees' proactive job re-design (e.g., job crafting) (Berg, Wrzesniewski, & Dutton, 2010; Wrzesniewski & Dutton, 2001; Wrzesniewski et al., 2003). According to Berg and colleagues (2010), employees actively craft jobs and social relationships to shape the meaning of their work and to fit individual goals, skills, and values. Therefore, in this study, I focused on an emerging contextual source that can influence the meaning of work, namely, job crafting.

Through job crafting, new possibilities emerge for meaningful work for the following reasons. First, job crafting enables employees to initiate and alter their jobs from the bottom up,

which provides opportunities for employees to "leverage the unique knowledge they have of their jobs and themselves to craft their jobs in ways that create more meaningfulness" (Berg, Dutton, & Wrzesniewski, 2013, p. 83). Similarly, Rosso and colleagues (2010) noted that job crafting allowed employees to make active changes in task and relational boundaries to fit personal goals, skills, and values, contributing to their experience of meaningful work (Berg et al., 2013; Wrzesniewski & Dutton, 2001). For example, employees can receive cues, input, or information from others at work to create new or alter meanings about their work (Wrzesniewski et al., 2003).

Second, except for performing job responsibilities, employees' personal initiatives can benefit organizations by fostering innovativeness and adaptability (Frese & Fay, 2001), which can create meaningful experiences (Berg et al., 2013). Fostering innovativeness and adaptability helps employees find positive meanings and greater good motivations for the whole organization. In this way, they feel their work is of importance. Additionally, when employees are more involved in crafting their jobs, they are more present and aware of their surroundings, contributing to a sense of personal meaning.

Third, previous literature provides evidence of the prediction of job crafting to meaningful work (e.g., Petrou et al., 2017a; Tims et al., 2016). For example, Tims and colleagues (2016) reported that job crafting could predict meaningfulness through the mediation effect of person-job fit. Their results showed that increasing structural resources predicted meaningfulness. Another example is Petrou and colleagues' (2017a) study. They reported similar results in which only increasing structural resources were positively related to weekly meaning-making. However, their studies applied the job crafting scale based on the JD–R model, and therefore, the relationship between relational crafting and cognitive crafting remains unclear.

In addition, to our knowledge, no empirical research addresses job crafting from the perspective of extending and reducing dimensions on meaningful work. Therefore, one of the main focuses of the present study was to explore the prediction of extending and reducing job crafting on meaningful work.

**Task crafting and meaningful work**

Regarding the relationship between task crafting and meaningful work, I propose that both extending and reducing task crafting can predict meaningful work positively. First, most jobs consist of tasks that can be crafted to create more meaningfulness. Extending task crafting behaviors such as adding whole tasks or projects can improve employees' perception of the meaningfulness and significance of their jobs. In addition, employees might allocate more time, energy, and attention to the tasks they consider meaningful for personal development. Furthermore, if the extending task crafting behaviors are other-directed actions, employees might feel meaningfulness during the process of being good to others.

Second, when employees decide to reduce their time and effort on specific unsuitable tasks, give less priority to, or pass these unsuitable tasks on, they might feel a sense of self-determination and control in their work. These tasks may be discarded because they hinder personal growth and are disadvantageous to employees' understanding of themselves or the whole world around them. These tasks do not have positive meanings. If they can be removed, employees may feel they are closer to their work purpose and goals, and there might be no obstacles to their personal growth. Therefore, I expect that both extending and reducing task crafting behaviors can predict meaningful work positively.

*Hypothesis 1. Task crafting predicts meaningful work. Both (a) extending task crafting and (b) reducing task crafting are positively related to meaningful work.*

**Relational crafting and meaningful work**

Another important job crafting dimension is relational crafting, including extending and reducing relational crafting, through which individuals might alter relationships, interactions, and connections with others to foster meaningfulness. Previous studies suggested that work relationships could provide crucial inputs to how employees make sense of the meaning of work, the job, and themselves in the job (Berg et al., 2013; Wrzesniewski et al., 2003).

I hypothesize that relational crafting can affect meaningful work for the following reasons. First, employees cultivate meaningfulness when building relationships with others because they feel a sense of pride, dignity, or worth during this process. In addition, individuals can reframe

or redefine the nature of the relationships for a new or more meaningful purpose. Employees can also provide others with support or assistance in carrying out their jobs and can encourage others to offer similar help when necessary. These interpersonal interactions can foster higher quality connections, increasing mutual trust, personal value, positive regard, and vitality (Berg et al., 2013), and heighten employees' sense of belongingness at work (Kahn & Heaphy, 2014).

Second, Baron and Pfeffer (1994) proposed that interpersonal relationships with others form employees' social fabric and the social context of their jobs. Other people can influence an employee's job attitudes by providing information and cues about their feelings and thoughts regarding work tasks (Salancik & Pfeffer, 1978). Wrzeniewski and colleagues (2003) suggested that work interactions alter employees' evaluation and content of work meaning. Thus, when expanding or limiting personal communications with others, employees can receive different information and cues about work tasks, which might affect employees' understanding of work meaning.

Third, previous research provides related support. Researchers have found that close interpersonal relationships with coworkers are positively related to the meaning of work, because "giving to others" enables employees to assist, mentor, support, or care for others (Colbert, Bono, & Purvanova, 2016; Grant, 2007). Wrzesniewski (2003) and Pratt and Ashforth (2003) developed conceptual models highlighting the importance of workplace relationships in the experience of meaning at work as well.

**Hypothesis 2.** *Relational crafting behaviors predict employees' perception of meaningful work. Both (a) extending relational crafting and (b) reducing relational crafting are positively related to meaningful work.*

**Cognitive crafting and meaningful work**

The meaning of work can also arise from cognitive crafting when employees alter how they think about their tasks, relationships, or the job as a whole. When engaging in cognitive crafting, employees will look afresh at their work tasks and responsibilities to have a deeper

understanding or to find personal meaning. Employees might view their tasks and responsibilities as more than just part of the job through cognitive crafting, which can change their subjective experience of work.

According to Berg and colleagues (2013), this form of job crafting makes employees think about their jobs as a whole, rather than as separate tasks or relationships. In addition, employees can draw mental connections between tasks or meaningful relationships and personal identities. Therefore, through cognitive crafting, employees can perceive their work and career as meaningful by better understanding their job.

*Hypothesis 3.* Cognitive crafting is positively associated with meaningful work.

## 4.5 The role of personality

I contend that personalities can influence the personal perceptions of meaningful work. Frieder, Wang, and Oh (2018) reported that conscientiousness, openness, and extraversion personalities have weak-to-moderate positive associations with meaningful work. Furthermore, neuroticism has a weak negative correlation with meaningful work (Woods & Sofat, 2013). In addition, personalities can be potential moderators between job crafting behaviors and meaningful work. As mentioned, job crafting refers to individuals' spontaneous changes to satisfy personal needs, values, and beliefs. Meaningful work reflects employees' subjective perception of positive meaning, greater good motivations, and meaning-making though work. A main source of the meaning of work is the self (Rosso et al., 2010). In other words, personal values, motivations, and beliefs can influence individuals' perceptions of meanings. Personalities reflect individual desires and cognitions; thus, these personal dispositions may affect employees' active behaviors and subjective perceptions.

Therefore, personalities may interact with employees' job crafting behaviors and influence their perception of meaningful work. For the purpose of this study, conscientiousness, agreeableness, and openness to experience were selected to explore their moderation effects on the relationship between job crafting and meaningful work. To keep the model parsimonious, I

link one personality trait to the most relevant job crafting dimension to explore the possible interactive effect on meaningful work.

First, the motivation of employees' task crafting is likely to be the need for control and for positive self-image. According to the theory of purposeful work behavior, among the Big Five personalities, conscientiousness and emotional stability are related with the striving for achievement, which reflects the desire to complete things in a timely, careful, efficient way and it is characterized by a strong focus on getting things done (Barrick et al., 2013). However, neurotic individuals or those who have less emotional stability do not see themselves as worthy, are less confident, are frequently distracted by worrying and become obsessed with details, and consequently, are more dissatisfied with themselves, their jobs, and their live. Thus, neurotic employees are more motivated to avoid failures than to accomplish tasks. Totally, conscientiousness is likely to be the most suitable moderator between job crafting and meaningful work.

Second, the motivation of relational crafting is to meet employees' need for relatedness and connection, which tends to be linked with communion striving motivation. Communion striving represents the motivation to obtain acceptance in personal relationships and to get along with others. Emotional stability, agreeableness, and extroversion tend to be associated with communion striving. However, the primary essence of extroversion is to obtain rewards and dominate others, rather than sociability. Extrovert employees are motivated by a desire to get ahead of others. Research has shown that extraverts tend to feel more pleasant affect when working alone, which implies that they are not driven by striving for communion (Lucas, Diener, Grob, Suh, & Shao, 2000). Striving for status is more suitable for extrovert people (Barrick et al., 2013). In addition, job crafting is a personal behavior and it is not necessary to dominate others. Compared with neuroticism, agreeableness is a better moderator because agreeable employees are altruistic, sympathetic, and eager to help others. Agreeable individuals are more likely to interact in harmonious ways with others at work. Therefore, agreeableness will be applied as the moderator between relational crafting and meaningful work.

Finally, cognitive crafting tends to be most relevant with openness to experience. Open

employees actively seek opportunities to gain personal growth through imaginative, curious, and creative behaviors. Cognitive crafting provides chances for them to view their work from a new way. Through cognitive crafting, they tend to highly perceive meaningfulness.

**Conscientiousness as a moderator**

Conscientious individuals have a tendency toward work motivation, achievement, self-control, organization, and planning. Employees with high conscientiousness are hardworking, industrious, persistent, responsible, dependable, and goal-oriented (Costa & McCrae, 1992). Conscientiousness is hypothesized to moderate the relationship between extending and reducing task crafting and meaningful work based on the theoretical rationales outlined below.

First, the prediction of task crafting on meaningful work might be greater if employees are conscientious. Employees with a high level of conscientiousness are dutiful, and their jobs are of importance to them. When employees work more intensively on specific tasks or engage in additional ones, they perceive their responsibilities for these tasks. In addition, conscientious people have long-term goals and focus on growth. Here, extending task crafting behavior is a way for them to increase development opportunities, pursue personal growth, prove their personal value, and achieve their work goals. Therefore, it might strengthen meaningful work for high conscientious employees.

Second, if conscientious individuals pass unsuitable tasks to others, they might feel a sense of loss of responsibility or development opportunities. These tasks make them feel their work is not important, which is not helpful in terms of creating meaning through work. Therefore, reductive task crafting behaviors might decrease the perception of meaningfulness for employees with a high level of conscientiousness.

> ***Hypothesis 4.*** *Conscientiousness moderates the relationship between task crafting and meaningful work, such that (a) the positive relationship between extending task crafting and meaningful work will be greater for employees with a high level of conscientiousness; (b) the relationship between reducing task crafting and meaningful work will be negative when conscientiousness is high.*

**Agreeableness as a moderator**

In the Big Five model, agreeable individuals are sympathetic, considerate, warm, compassionate, generous, helpful, and liked by others. Characteristics of agreeableness include communion, trust, morality, altruism, cooperation, modesty, and sympathy (Costa & McCrae, 1992). Agreeable people prefer a harmonious work atmosphere because of their tendency to avoid conflicts with others. Employees with high agreeableness are slow to become aggressive or angry, and they are altruistic and sensitive to the needs of others. Barrick et al. (2002) proposed that agreeableness is linked to communion striving. In addition, they value cooperation and compliance, and this personality has been found to be an essential predictor of jobs involving significant interpersonal interaction.

Extending relational crafting means employees will invest time and effort in personally valued relationships. Furthermore, employees may search for opportunities to work with people with whom they get along well. When agreeable people extend their work relationships, the perception of meaningful work will be greater for the following reasons. First, agreeable people tend to be team-oriented, friendly, and pro-social, and their temperament makes them value relationships. These tendencies are favorable for them when devoting their time and effort to maintaining close relationships with others. They might also create opportunities to build new relationships by spending more time with others. As agreeable people are sensitive to others' needs, when engaging in extending relational crafting, greater good motivations such as other-directed action in meaningful work might be facilitated.

Second, when working with people they get along well with, agreeable individuals perceive their personal importance and significance in the interpersonal network and judge their work as valuable and meaningful. During this process, extending relational crafting behaviors conform to agreeable employees' psychological meaningfulness in work, and they find their personal value. Moreover, interpersonal connectedness is one mechanism of belongingness. The perception of interpersonal closeness leads to meaningful belongingness and togetherness because these connections help employees feel comfortable and supportive (Pratt & Ashforth,

2003).

Third, when spending more time working with people they valued, agreeable employees might deepen their understanding of themselves and the world around them, because they can benefit from the cooperation or relationships with valued colleagues or supervisors. Moreover, improved relationships and enhanced personal social resources are usually conceptualized as personal growth (Park, 2010) for them. Thus, extending relational crafting can facilitate their personal growth, communion striving goal achievement, and perception of meaningfulness.

Finally, reducing relational crafting includes behaviors like limiting the amount of time with other people, avoiding contact with others, and communicating less with others who are difficult to get along with and who are not supportive. These types of avoidance crafting restrict the social network of agreeable employees and might cause aggression or conflict in interpersonal relationships. Furthermore, this behavior might lead to inconformity with their orientations to others. When engaging in reducing relational crafting, agreeable employees might feel self-doubt about their personal values, and it is not likely they will perceive the meaningfulness during this process.

**Hypothesis 5.** *Agreeableness moderates the relationship between relational crafting and meaningful work, such that (a) the relationship between extending relational crafting and meaningful work will be positive for employees with a high level of agreeableness; (b) the relationship between reducing relational crafting and meaningful work will be negative when agreeableness is high.*

**Openness to experience as a moderator**

Openness to experience is characterized by imagination, sensitiveness, listening to the conscience, intellectuality, curiosity, and independent judgments (Costa & McCrae, 1992). Open people have strong preferences for working with ideas, engaging in divergent thinking, and doing things that are not clear or well defined (Barrick et al., 2013). I hypothesize that openness can moderate the relationship between cognitive crafting and meaningful work for

the following reasons.

First, cognitive crafting means seeking out new and more meaningful ways to better understand work (Tilmans & Gunderman, 2017). Exploring the unfamiliar, a strong tendency in openness, motivates individuals to think differently, and consider alternative solutions. Open people welcome new and unusual ideas based on their strong tendency to explore the unfamiliar, and they likely consider the tasks and the job from different angles. Open employees have flexible attitudes and engage in divergent thinking (McCrae, 1994). Thus, when engaging in cognitive crafting behaviors, they better understand their work and the surrounding world.

Second, cognitive crafting enables employees to engage in divergent and creative mental activities, which are the essence of meaning-making through work. Open individuals proactively seek opportunities for personal growth through imaginative, curious, and creative behaviors to satisfy their curious nature (Barrick et al., 2013). Cognitive crafting can provide these opportunities to open employees. Therefore, the positive relationship between cognitive crafting and meaningful work might be greater when high openness employees think differently about their tasks or job.

*Hypothesis 6. Openness to experience moderates the positive relationship between cognitive crafting and meaningful work. The positive relationship between cognitive crafting and meaningful work will be greater for employees with a high level of openness than those with a low level of openness.*

**Figure 5 The hypothesized model in chapter 4**
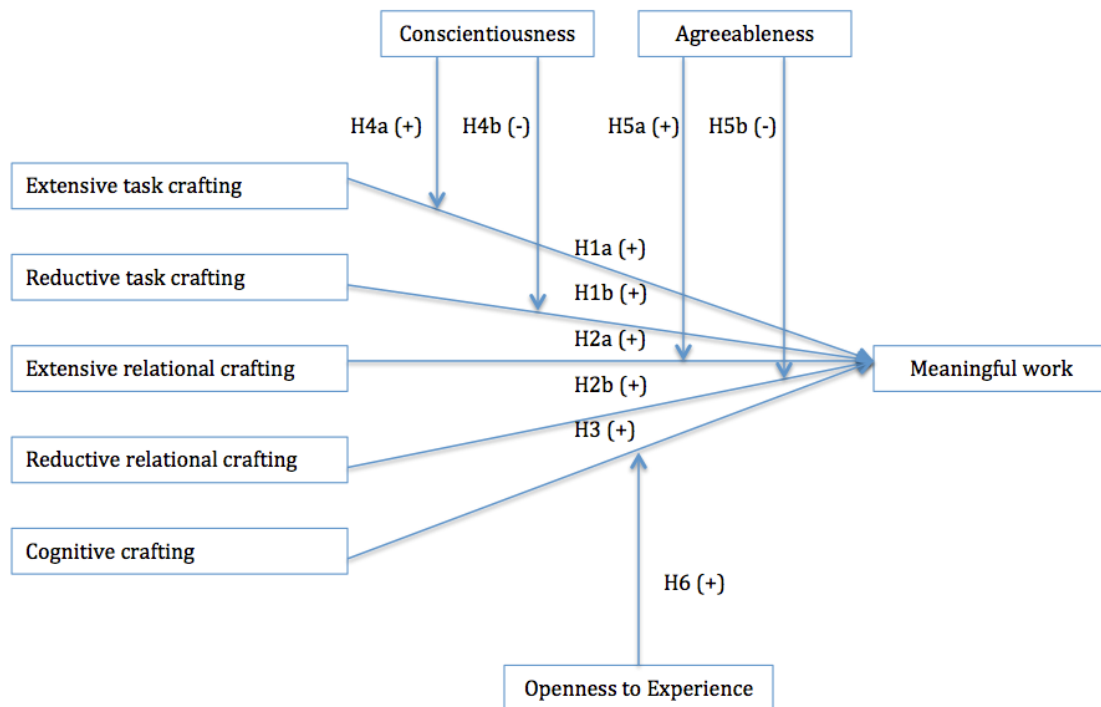


## 4.6 Method

### Participants

Data was collected through a large online survey company in Japan. Prior to the three surveys, I used the standard translation-back-translation procedure to translate job crafting and meaningful work items into Japanese (cf. Brislin, 1970). All responses except for the demographic variables were measured on a seven-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). Each participant had a unique identifier, which was used to match data in the three-wave survey. Participation was voluntary, and a credit point reward was provided, which could be exchanged for gift vouchers. After screening, 172 employees provided complete data and were thus included in our analyses. Participants were all full-time employed persons at the time of the third-wave survey.

In the first survey, I collected demographic information and assessed the Big Five personalities using the short form of the Big Five Scale developed by Namikawa and colleagues

(2012). I received 670 valid responses after distributing the electronic questionnaire to 1,254 employees. In the second survey, data on job crafting dimensions were gathered from the first-wave respondents. I used Weseler and Niessen's (2016) job crafting scale, and received 298 responses. Respondents who changed jobs or altered work positions within organizations from the deadline of the first survey to that of the second were excluded, resulting in 253 feasible responses. After one month, data on meaningful work was collected in the third survey. I adopted the Work as Meaning Inventory (WAMI) scale developed by Steger and colleagues (2012). After excluding respondents who changed jobs or work positions from the deadline of the second survey to that of the third, 172 responses were feasible for our analyses.

Of the 172 respondents, approximately 76% were male. The average participant was 42 years old. Average tenure was 13 years, 24% of the respondents are managers, of which 44% work in large companies (in which the number of employees exceeds 1,000). In addition, the participants represented several different industries, including manufacturing and construction, services and real estate, information and communication, retail and wholesale, transportation, electricity and gas, finance and insurance, medical and welfare, education, and others.

**Measures**

*Personalities.* Conscientiousness, agreeableness, and openness were assessed using 7, 6, and 6 items, respectively, from Namikawa and colleagues' (2012) short form Big Five Scale. Based on the NEO-Five Factor Inventory (NEO-FFI) research items, this short form Scale demonstrates sufficient reliability and validity. In the current sample, the three personality scales yielded an internal consistency reliability of 0.83, 0.85, and 0.76, respectively.

*Job crafting.* Job crafting was assessed using Weseler and Niessen's (2016) 14-item scale. This job crafting scale measures how employees change their work tasks, relations, and cognitions, including extending task crafting behaviors, reducing task crafting behaviors, extending relational crafting behaviors, reducing relational crafting behaviors, and cognitive crafting behaviors.

*Extending task crafting.* An example research item for extending task crafting is "I undertake or seek additional tasks." The coefficient alpha reliability for the extending task

crafting scale for the current sample was 0.70.

**_Reducing task crafting._** Three research items were used to measure reducing task crafting behaviors. A sample research item is "I decide (alone or together with colleagues/supervisors) not to work on less suitable tasks." For the present sample, the internal consistency reliability for the reducing task crafting scale is 0.62.

**_Extending relational crafting._** Two research items were used to measure extending relational crafting. An example item for is "I look for opportunities to work together with people whom I get along well with at work." Cronbach's alpha for the extending relational crafting scale for the current sample was 0.65.

**_Reducing relational crafting._** Three items were used to measure reducing relational crafting behaviors. A sample item is "I usually limit the amount of time I spend with people I do not get along well with, and only contact them for things that are absolutely necessary." In the present sample, the internal consistency reliability for reducing relational crafting scale was 0.80.

**_Cognitive crafting._** Three research items were used to test employees' cognitive crafting behaviors. An example research item is "I try to look upon the tasks and responsibilities I have at work as having a deeper meaning than is readily apparent." Cronbach's alpha for cognitive crafting in the current sample was 0.79.

**_Meaningful work._** I measured meaningful work using the WAMI scale developed by Steger and colleagues (2012). Respondents were presented with ten research items. A sample item is "I view my work as contributing to my personal growth." The coefficient alpha reliability for meaningful work in the current sample was 0.91.

**_Control variables._** To minimize the unintended effects of other exogenous variables, I controlled several variables that reflect participants' demographic information, including gender, age, tenure, rank, extroversion, and neuroticism. I created dummy variables for gender (1 = Male; 0 = Female) and rank (1 = managers; 0 = non-managers) to distinguish the groups. Extroversion and neuroticism were both assessed using five items. In the current sample, the internal consistency reliability of the extroversion scale was 0.87, and that for neuroticism was

0.89.

## 4.7 Results

Table 2 displays the descriptive statistics (e.g., means, standard deviations) as well as the inter-correlations of the variables and scale reliabilities. According to the correlation matrix (Table 2), extending task crafting and reducing task crafting are significantly correlated with meaningful work ($r = 0.50, 0.53$ respectively), as well as extending relational crafting, reducing relational crafting and cognitive crafting ($r = 0.43, 0.43, 0.33$, respectively). These results lend initial support to our predictions.

Before testing the hypotheses, I conducted a confirmatory factor analysis (CFA) using the R language (Version 3.4.4) to assess the fit of the hypothesized model. Table 1 provides the results of the CFA. The measures included the items for the five job crafting dimensions and meaningful work. Personality measurements were excluded because they are not work-related variables. After conducting four analyses, the hypothesized six-factor model demonstrated the best fit over the other three models. The comparative fit index (CFI) was .87, and the root-mean-square error of approximation (RMSEA) was .08.

Table 7. Result of confirmatory factor analyses in chapter 4

| Models | $X^2$ | df | P-value | CFI | TLI | RMSEA | SRMR |
|---|---|---|---|---|---|---|---|
| 1. Hypothesized six-factor model | 2304.048 | 276 | <.001 | 0.87 | 0.85 | 0.08 | 0.11 |
| 2. Four-factor model (combining two extending crafting dimensions into a single factor and two reducing crafting dimensions into a single factor; cognitive crafting; Meaningful work) | 2304.048 | 276 | <.001 | 0.82 | 0.80 | 0.09 | 0.13 |
| 3. Two-factor model (combining five job crafting dimensions into a single factor into a single factor; meaningful work) | 2304.048 | 276 | <.001 | 0.78 | 0.76 | 0.10 | 0.11 |
| 4. One-factor model (combining five job crafting dimensions and meaningful work into one factor). | 2304.048 | 276 | <.001 | 0.61 | 0.58 | 0.14 | 0.15 |

*Note. N = 172.*

I predicted that individual personalities (conscientiousness, openness, agreeableness) would moderate the relationships between specific job crafting dimensions and meaningful work. These relationships were tested using a hierarchical regression analysis.

Interaction terms often cause multicollinearity because of their correlations with the main effects. Thus, when computing the interaction terms, I standardized the variables before multiplying them with each other. In the regression analyses, I entered demographic variables (gender, age, rank, tenure) and two personalities—extroversion and neuroticism—as controls in the first step. In the second step, conscientiousness, openness, and agreeableness, and five job crafting dimensions were added as independent variables. Finally, the interaction effects were added to the regression. Table 9 presents the results of the detailed regression analyses.

Table 8. Descriptive statistics and correlations among variables in chapter 4

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Gender | 0.76 | 0.43 | — | | | | | | | | | | | | | | |
| 2. Age | 41.72 | 9.53 | 0.32** | — | | | | | | | | | | | | | |
| 3. Rank (1=yes, 0=no) | 0.24 | 0.43 | 0.20** | 0.32** | — | | | | | | | | | | | | |
| 4. Tenure | 13.45 | 8.52 | 0.28** | 0.62** | 0.22* | — | | | | | | | | | | | |
| 5. Extroversion | 3.90 | 0.99 | 0.07 | -0.10 | 0.01 | -0.05 | (0.87) | | | | | | | | | | |
| 6. Neuroticism | 4.20 | 0.89 | 0.05 | 0.26** | 0.06 | 0.11 | 0.30** | (0.89) | | | | | | | | | |
| 7. Extending task crafting | 4.29 | 0.99 | 0.05 | 0.15 | 0.17* | 0.13 | 0.59** | 0.42** | (0.70) | | | | | | | | |
| 8. Reducing task crafting | 4.09 | 1.02 | -0.01 | -0.08 | 0.02 | -0.04 | 0.73** | 0.30** | 0.72** | (0.62) | | | | | | | |
| 9. Extending relational crafting | 3.72 | 1.27 | 0.07 | -0.15* | 0.04 | -0.08 | 0.77** | 0.16* | 0.44** | 0.74** | (0.65) | | | | | | |
| 10. Reducing relational crafting | 4.17 | 0.80 | -0.05 | -0.11 | 0.11 | -0.08 | 0.57** | 0.11 | 0.42** | 0.51** | 0.51** | (0.80) | | | | | |

| | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11. Cognitive crafting | 3.82 | 0.90 | 0.03 | -0.15 | 0.00 | -0.13 | 0.64** | 0.09 | 0.48** | 0.56** | 0.60** | 0.67** | (0.79) | | | | |
| 12. Conscientiousness | 4.11 | 0.83 | -0.01 | 0.09 | 0.11 | 0.02 | 0.57** | 0.53** | 0.68** | 0.64** | 0.47** | 0.43** | 0.51** | (0.83) | | | |
| 13. Openness | 4.49 | 0.73 | -0.05 | 0.07 | -0.06 | -0.01 | 0.11 | 0.46** | 0.15* | 0.06 | -0.05 | 0.12 | 0.11 | 0.23** | (0.85) | | |
| 14. Agreeableness | 4.16 | 0.73 | 0.07 | -0.16* | 0.01 | 0.20** | 0.20** | -0.11 | 0.10 | 0.13 | 0.15 | 0.32** | 0.32** | 0.16* | 0.39** | (0.76) | |
| 15. Meaningful work | 4.26 | 1.11 | -0.01 | 0.05 | 0.13 | 0.08 | 0.59** | 0.48** | 0.50** | 0.53** | 0.43** | 0.33** | 0.33** | 0.55** | 0.20** | -0.01 | (0.91) |

*Notes.* Cronbach's alphas are on the diagonal.

$N = 172$.

Gender: 1 = male; 0 = female. Rank: 1= managers; 0 = non-managers.).

*p < .05; **p < .01; ***p < .001.

Based on the regression results, the relationship between extending task crafting and meaningful work is not significant ($\beta = .01$, *ns*). Reducing task crafting is positively related to meaningful work as expected ($\beta = .23$, $p < .05$), partially supporting hypothesis 1. Extending relational crafting has no significant relationship with meaningful work ($\beta = .11$, *ns*). Reducing relational crafting is negatively instead of positively related to meaningful work ($\beta = -.24$, $p < .001$), thus hypothesis 2 is not supported. The regression coefficient of cognitive crafting to meaningful work is not significant ($\beta = .04$, *ns*); thus, hypothesis 3 is not supported.

I expected that conscientiousness would moderate the relationship between extending and reducing task crafting and meaningful work. The results did not support our prediction ($\beta = -.04$, $-.08$, respectively, *ns*). Thus, hypothesis 4 is not supported. In hypothesis 5, I predicted that agreeableness moderates the relationship between relational crafting and meaningful work. The overall model results show that the interaction effect of agreeableness and extending relational crafting is significant ($\beta = .13$, $p < .05$). Moreover, agreeableness strengthens the negative relationship between reducing relational crafting and meaningful work ($\beta = -.13$, $p < .05$). Finally, in hypothesis 6, I expected that when open individuals engage in more cognitive crafting, they perceive more work meaningfulness. The regression results support this hypothesis ($\beta = .12$, $p < .05$). To probe the form of the significant interactions, I followed Aiken and West's (1991) recommended procedure and plotted low versus high scores for agreeableness and extending/reducing relational crafting, and openness and cognitive crafting.

The slopes in Figure 1a indicate the interactions between extending relational crafting and agreeableness. Employees with a high level of agreeableness demonstrate a significant increase in their perception of meaningful work when expanding individuals' relational boundaries ($\beta = .26$, 95% CI [0.07, 0.45]). For employees with low agreeableness, meaningful work was not significant when engaging in extending relational crafting behaviors ($\beta = .17$, 95% CI [-0.01, 0.35]). In summary, the positive relationship between extending relational crafting and meaningful work is greater for employees with a high level of agreeableness. The low level of agreeableness shows no moderation effects. These results support hypothesis 5a.

Table 9. Hierarchical regression results in chapter 4

| | Meaningful work | | | | | | | | |
| | Step 1 | | | Step 2 | | | Step 3 | | |
| | $\beta$ | SE | P-Value | $\beta$ | SE | P-Value | $\beta$ | SE | P-Value |
|---|---|---|---|---|---|---|---|---|---|
| (Intercept) | -.13 | .45 | .77 | -27 | .41 | .52 | -.18 | 0.4 | 0.66 |
| **Control variables** | | | | | | | | | |
| Gender | -.02 | .17 | .90 | .15 | .15 | .34 | .05 | .15 | .72 |
| Age | .00 | .01 | .75 | -.00 | .01 | .60 | -.01 | .01 | .51 |
| Tenure | .02 | .01 | .10 | .02 | .01 | .05 | .02 | .01 | .05 |
| Rank | .24 | .17 | .17 | .14 | .15 | .35 | .16 | .15 | .27 |
| Extroversion | .40 | .07 | .00*** | .10 | .08 | .23 | .07 | .08 | .35 |
| Neuroticism | -.09 | .07 | .24 | -.02 | .07 | .74 | -.06 | .07 | .38 |
| **Independent variables** | | | | | | | | | |
| Extending task crafting | | | | .01 | .09 | .89 | -.08 | .09 | .36 |
| Reducing task crafting | | | | .23* | .09 | .01 | .20* | .09 | .03 |
| Extending relational crafting | | | | .11 | .08 | .15 | .20* | .08 | .01 |
| Reducing relational crafting | | | | -.24*** | .07 | .00 | -.24*** | .07 | .00 |
| Cognitive crafting | | | | .04 | .08 | .61 | .08 | .09 | .38 |
| Conscientiousness | | | | .28*** | .07 | .00 | .27*** | .07 | .00 |
| Agreeableness | | | | .23** | .08 | .00 | .23** | .08 | .00 |
| Openness | | | | .06 | .07 | .36 | .09 | .07 | .19 |
| **Interaction effects** | | | | | | | | | |
| Extending task crafting × Conscientiousness | | | | | | | -.04 | .08 | .57 |
| Reducing task crafting × Conscientiousness | | | | | | | -.08 | .07 | .25 |
| Extending relational crafting × Agreeableness | | | | | | | .13* | .06 | .03 |
| Reducing relational crafting × Agreeableness | | | | | | | -.13* | .06 | .02 |
| Cognitive crafting × Openness | | | | | | | .12* | .05 | .03 |
| Multiple R-squared | .34 | | | .45 | | | .50 | | |
| Adjusted R-squared | .29 | | | .40 | | | .44 | | |
| ΔR2 | .05 | | | .05 | | | .06 | | |
| F | 7.41 | | | 9.18 | | | 8.10 | | |

*Notes.* $N = 172$.

*$p < .05$; **$p < .01$; ***$p < .001$.

**Figure 6 Interactive effects of job crafting and personalities on meaningful work**

(a) Agreeableness as a moderator of the relationship between
extensive relational crafting and meaningful work.
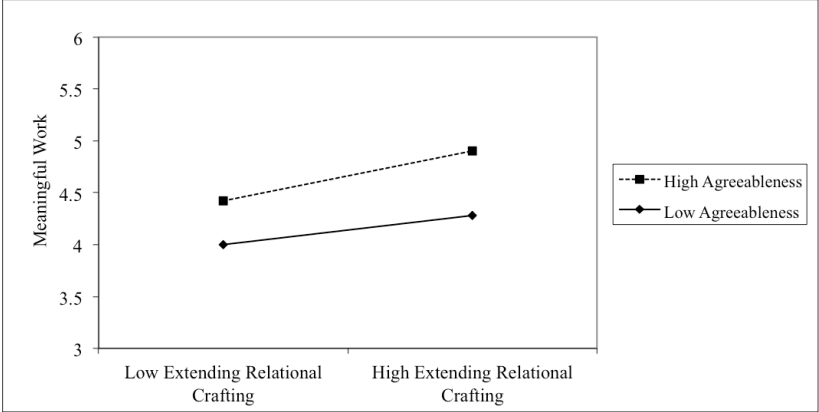


(b) Agreeableness as a moderator of the relationship
between reductive relational crafting and meaningful work.
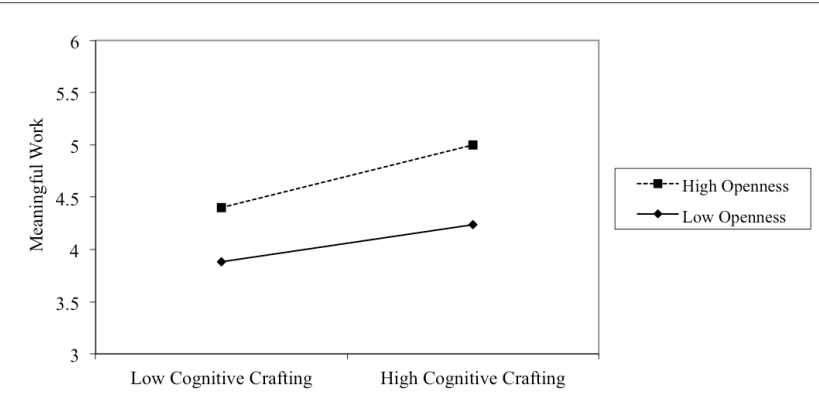


(c) Openness as a moderator of the relationship between
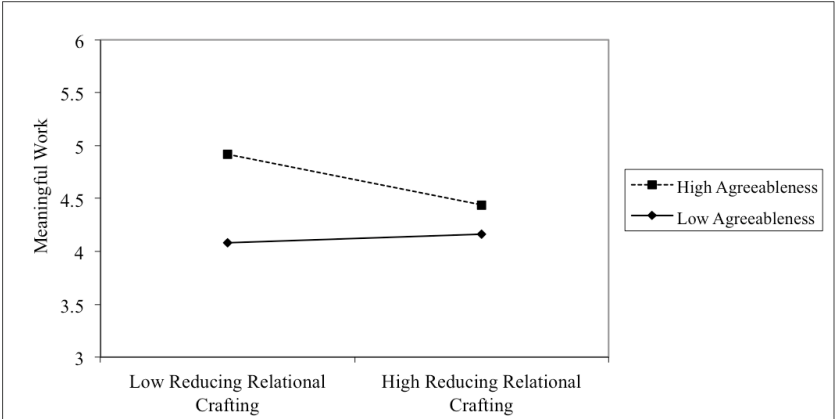cognitive crafting and meaningful work.

Figure 1b indicates the slopes of agreeableness for the relationship between reducing relational crafting and meaningful work. For employees with high agreeableness, a significant decrease is evident in their perception of meaningful work when they limit their relational boundaries ($\beta$ = -.26, 95% CI [-0.44, -0.09]). However, for individuals with a low level of agreeableness, there is a non-significant decrease in meaningful work when engaging in reducing relational crafting ($\beta$ = .02, 95% CI [-0.19, 0.24]). These results support Hypothesis 5b.

Figure 1c shows the slopes of openness for the relationship between cognitive crafting and meaningful work. For employees with both a low and high level of openness, meaningful work increases significantly when they engage in cognitive crafting behaviors ($\beta$ = .22, 95% CI [0.06, 0.39]; $\beta$ = .35, 95% CI [0.17, 0.52]. Employees with both a high and low level of openness demonstrate increased perception of meaningful work when crafting their work cognitively. Thus, hypothesis 6 is supported.

**4.8 Discussion**

The current study examined meaningful work as a significant outcome of job crafting. The interaction effects of job crafting and individual personalities on meaningful work were also explored. The analyses revealed that reducing task crafting, extending relational crafting, and reducing relational crafting behaviors can predict meaningful work directly. However, there is no significant relationship between employees' extending task crafting behaviors, extending relational crafting, and cognitive crafting behaviors and their perception of meaningful work. Extending task boundaries means employees need to input more time and effort into specific or additional tasks, which might decrease job satisfaction. For example, Klassen and Chiu (2010) reported that a heavier workload leads to overall work stress and, in turn, decreases employees' job satisfaction. Therefore, the positive effects of extending task crafting to individual self-efficacy and its negative effects on individual job satisfaction might counteract with each other. In this case, employees cannot perceive more meaningfulness when expanding their task boundaries.

**Figure 7 The results for the hypothesized model in chapter 4**
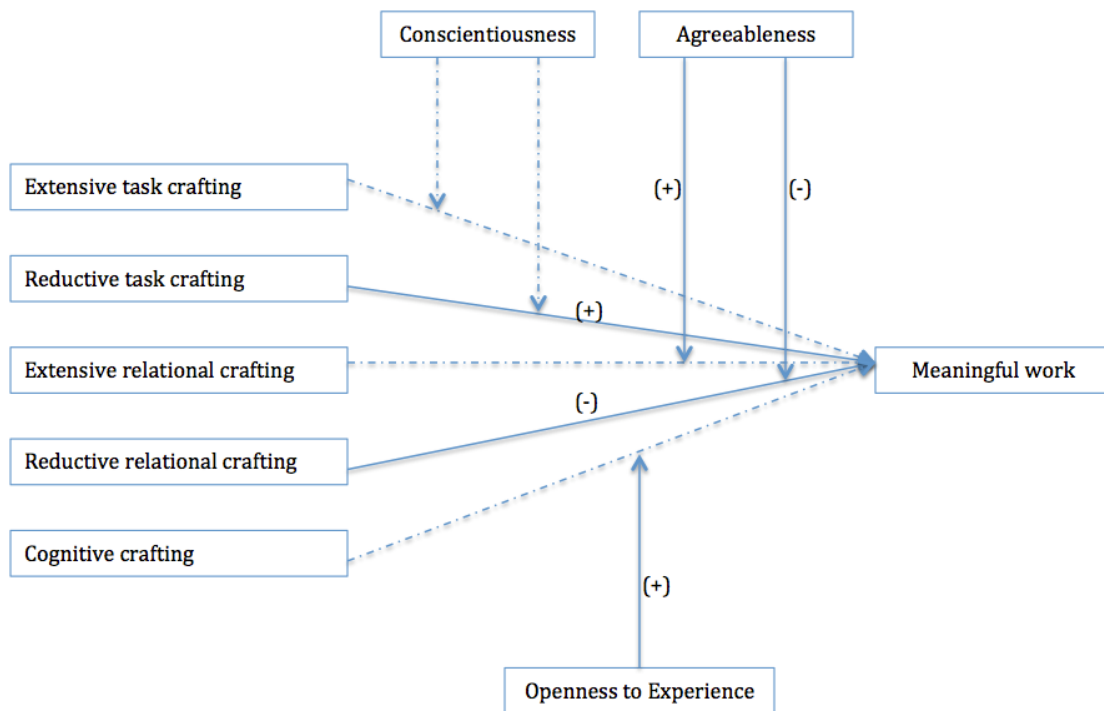


When engaging in more reducing task crafting behaviors, employees perceive stronger meaningfulness in their work. First, the reason might be associated with the concept of reducing task crafting. As mentioned, to limit task boundaries, employees might decide not to work on less suitable work, pass unsuitable tasks to others, or give less priority to these inappropriate tasks. These unsuitable tasks might have some discrepancy in the employees' personal values, motivations, and beliefs. Thus, when investing less time and effort in these unsatisfying tasks, they can focus on other tasks that fit their individual goals or values. Moreover, when employees actively decrease their input in some specific tasks, they have a feeling of dominance and control. Finally, the reason seems to be associated with Japanese culture as well. In Japan, 60% of the employees experience intense anxiety and stress (Ministry of Health, Labour and Welfare [MHLW], 2010) due to overwork and large workload (Kotera, Van Laethem, & Ohshima, 2020). In such cultural context, reducing task crafting may be a strategy for employees to reduce workload, decrease work stress, and in turn perceive positive work meanings. In the above ways, employees feel stronger meaningfulness when reducing task

crafting behaviors.

Wrzesniewski and colleagues (2003) proposed that individuals' interpersonal connections with others on the job significantly affect the meaning of work. However, there is no direct prediction of extending relational crafting on meaningful work. The results showed that extending relational crafting behaviors help employees feel more meaningful only when employees reported a high level of agreeableness. Thus, the association between extending relational crafting and meaningful work is complicated and considering the individual difference is important when encouraging extensive relational crafting to increase work meaningfulness. However, reducing personal relational boundaries decreases employees' perception of meaningful work. When engaging in reducing relational crafting, they might limit communication time or avoid connections with the people with whom they do not get along. These behaviors might not be conducive to group cohesion and prevent employees from learning from and understand others. Entrenched in these diminished relationships, individuals find it difficult to perceive positivity and meaningfulness.

The regression results showed that there was no prediction effect of cognitive crafting behaviors and meaningful work. First, cognitive crafting means that employees change their cognitive work boundaries to enhance work meanings. Here, work meaning is more related to personal tasks and responsibilities, which is not necessary to be significant and positive. However, meaningful work is a eudaimonic focus (growth- and purpose-oriented), which is significant for individuals and has a positive valence. Moreover, meaningful work includes meanings that can positively affect others and meaningful life, for example, greater good motivations and meaning-making through work. Thus, it is difficult to find the prediction effect of cognitive crafting on meaningful work because their concepts and research items are very different. To unpack the relationship between cognitive crafting and meaningful work, the regression between cognitive crafting and three dimensions of meaningful work is needed. After calculation, according to Table 4, there is no significant prediction effect of cognitive crafting and three meaningful work dimensions. These results are beyond our expectation, and future research should explore the relationship by using other scales of cognitive crafting and

meaningful work and explain the reasons for their relationship.

When conscientiousness interacting with both extending and reducing task crafting, employees do not perceive their work as meaningful. However, agreeableness is a significant moderator between both extending and reducing relational crafting behaviors and meaningful work. When employees high in agreeableness expand their relational boundaries, the prediction of extending relational crafting to meaningful work is stronger. In contrast, if employees with a high agreeableness personality limit their connections with other people, they perceive less meaningfulness. Finally, openness is also a significant moderator (involving a high and low level of openness) that can strengthen the positive relationship between cognitive crafting and meaningful work.

The current study makes several theoretical contributions to the job crafting literature. First, the present empirical experiments verify previous theoretical findings on the relationship between job crafting and meaningful work. Previous research mainly theoretically supported this outcome. This study provides empirical evidence of meaningful work as a significant outcome of job crafting. Second, the previous job crafting literature mainly focused on job crafting concepts based on the JD–R model and the original job crafting framework with three primary dimensions. The present study shifts scholarly attention on extending and reducing job crafting framework.

Third, according to the regression analyses, among the five job crafting dimensions, reductive crafting, including both reductive task crafting and reductive relational crafting, showed the strongest effect on meaningful work. In other words, employees perceive their work as meaningful when the job provides opportunities to reduce the quality, scope, and quantity of their work tasks. However, if they engage in reducing relational crafting, they feel meaningless. Fourth, reducing task crafting has positive rather than negative predictions for meaningful work, as expected. Fifth, agreeableness is a significant moderator between both extending and reducing relational crafting and meaningful work. Here, an openness personality moderates the relationship between cognitive crafting and meaningful work. In sum, reducing task crafting and reducing relational crafting influence employees' perception of meaningfulness

significantly. Individual differences, such as personalities, moderate the relationships between

job crafting dimensions and meaningful work.

Table 10. The prediction effect of cognitive crafting on three meaningful work dimensions

| | Meaningful work | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Positive meaning | | | Meaning making | | | Greater good motivation | | |
| | $\beta$ | SE | P-Value | $\beta$ | SE | P-Value | $\beta$ | SE | P-Value |
| (Intercept) | .00 | -.05 | 1.00 | .00 | -.07 | 1.00 | .00 | -.07 | 1.00 |
| Control variables | | | | | | | | | |
| Gender | -.07 | -.14 | .59 | -.24 | -.17 | .16 | -.22 | -.17 | .19 |
| Age | .00 | -.01 | .99 | -.01 | -.01 | .57 | -.01 | -.01 | .17 |
| Tenure | .02* | -.01 | .04 | .02* | -.01 | .04 | .02* | -.01 | .02 |
| Rank | .20 | -.13 | .15 | .11 | -.17 | .51 | .04 | -.17 | .83 |
| Extroversion | -.01 | -.07 | .95 | .13 | -.09 | .13 | .12 | -.08 | .15 |
| Neuroticism | -.04 | -.05 | .45 | -.05 | .07 | .44 | .00 | -.06 | .98 |
| Independent variables | | | | | | | | | |
| Extending task crafting | -.02 | -.08 | .77 | .01 | -.10 | .91 | -.03 | -.10 | .78 |
| Reducing task crafting | 0.20* | -.08 | .02 | .30* | -.11 | .01 | .27* | -.11 | .01 |
| Extending relational crafting | -.01 | -.07 | .86 | .14 | -.08 | .09 | .15 | -.08 | .06 |
| Reducing relational crafting | -.07 | -.06 | .23 | -.30** | -.07 | .00 | -.24** | -.07 | .00 |
| Cognitive crafting | .07 | -.07 | .27 | .03 | -.08 | .75 | -.03 | -.08 | .69 |
| Conscientiousness | .19** | -.07 | .00 | .30*** | -.08 | .00 | .29*** | -.08 | .00 |
| Agreeableness | .03 | -.07 | .70 | .07 | -.09 | .42 | .00 | -.09 | .97 |
| Openness | .27** | -.08 | .00 | .23* | -.10 | .02 | .26* | -.10 | .01 |
| Multiple R-squared | .37 | | | .45 | | | .36 | | |
| Adjusted R-squared | .31 | | | .40 | | | .31 | | |
| ΔR2 | .06 | | | .05 | | | .05 | | |
| F | 6.55 | | | 9.07 | | | 6.44 | | |

*Notes.* $N = 172$.

　　*p* < .05; **p* < .01; ***p* < .001.

**Practical implications**

　　Based on our findings, I propose several significant practical implications. First, to improve employees' perception of work meaningfulness, organizations can encourage employees to engage in more reductive task crafting behaviors and to decrease reducing relational crafting behaviors. In particular, relational tasks should be mainly distributed to agreeable individuals. Tasks involving more cognitive crafting behaviors might be more suitable for open employees.

　　Second, the moderator effects indicate that managers should be particularly concerned about job crafting behaviors resulting in meaningful work among employees with particular personalities. That is, the presence of extending relational crafting behaviors may be a considerable problem among low-agreeableness employees. Thus, organizations and managers should target these individuals, specifically when implementing job crafting interventions. If there is no effective measure to increase reductive crafting behaviors or decrease reducing relational crafting behaviors, management is encouraged to include personality tests (e.g., measures of agreeableness and openness) in their training lectures.

　　Finally, building a friendly company culture filled with harmonious interpersonal relationships is a good measure by which to help employees perceive meaningfulness in their work. This supportive work context helps employees build positive and healthy work relations.

**Limitations and future research**

　　The results and conclusions of the present study should be considered alongside certain limitations. First, I applied self-reported measures to assess employees' job crafting behaviors, personalities, and perceptions of meaningful work. Thus, potential common method variance (CMV) and artificially inflated relations between variables might exist. However, the data were collected at different time points and intervals to minimize the CMV (Podsakoff et al., 2003). The anonymous nature of the sample may also minimize this potential problem. Furthermore,

as job crafting is a self-started behavior and meaningful work is based on individual perceptions, it is not reasonable to measure such constructs through other-reported methods, because job crafting behaviors may often be performed outside supervisors or coworkers' awareness. Therefore, using self-reported measurements is appropriate in the current study. In fact, previous research supports using self-reported measures as an effective method to assess employees' proactivity (e.g., Parker, Williams, & Turner, 2006). I also conducted a single-factor test to ensure that CMV was not a serious issue. According to the results of the factor analysis, the first unrotated factor captured only 27% of the variance in the data. Thus, no single factor emerged. Therefore, these results confirm that CMV is not an issue in this study.

Second, as our data was gathered in one (Japan) culture, the generalizability of the findings among other cultures is not clear. Specific cultures might reflect distinct work conditions. Japanese employees work very hard, and this type of work culture may make individuals more conscientious than those from other cultures. People in different societies have different values and beliefs, which might influence individuals' personalities. Thus, future research should replicate the present study in other cultures.

Third, the collection of research data is another limitation since it prevents us from examining causal relationships. Reverse causality might exist in the relationship between job crafting and meaningful work. That is, if employees benefit from positive meaning, greater good motivations, and meaning-making activities through work, they might engage in more job crafting behaviors to feedback the meaningfulness. Given that the job crafting literature is dominated by cross-sectional designs, future research could examine the possible reverse causality or cyclic relationships between job crafting and meaningful work using longitudinal data.

Future research can extend the present conceptual framework and findings in several ways. First, to make the model parsimonious, the current chapter only selected one moderator for each job crafting dimension. Totally, the present research addressed three of the Big Five personalities as moderators. However, there is possibility that employees with a high level of extroversion and neuroticism might perceive work meaningfulness when engaging in relational

crafting. I encourage scholars to investigate the moderator effects of the other two personalities (extroversion and neuroticism) in the future. Other potential individual differences, such as a proactive personality, should also be explored. Second, the present study reported a negative relationship for the interaction between reducing relational crafting behaviors and agreeableness personality and meaningful work. Future research could explore other possible moderators or interventions to achieve a positive influence.

To conclude, the current study suggests that job crafting, a variable that has only recently received attention in work design research, can affect an important work outcome, namely meaningful work. When engaging in specific job crafting behaviors, employees might perceive their work as meaningful to different degrees. Our findings indicated not only the main effects of extending and reducing job crafting behaviors on meaningful work but also the moderation effects of employees' personalities. Given the significant theoretical and practical implications of this study, I encourage additional research on this topic.

# CHAPTER 5 General Discussion

The primary purpose of this dissertation was to study how employees take actions to shape their work boundaries, by conceptualizing and adjusting work tasks, enacting interpersonal relationships to achieve work goals, and ascribing work meaning and significance. The research also examined the influence of social environment on job crafting and the impact of crafting behaviors on meaningful work. Besides, the moderating role of the Big Five personalities was explored. More specifically, first, it investigated the facilitation of four social characteristics (social support, interdependence, interaction outside the organization, and feedback from others), as well as the moderating role of neuroticism on employees' task, relational, and cognitive crafting behaviors. Second, the influential effects of extensive and reductive job crafting behaviors, as well as the moderation effects of Big Five personalities on meaningful work, were addressed. I presented two empirical studies with different research designs to achieve the research purpose.

This chapter summarizes the main findings in both studies and answers previous research questions. Next, it outlines the theoretical contributions and practical implications of both research settings. In the last section, the chapter will be ended with the limitations of the current thesis and several recommendations for future research as well as an overall conclusion.

## 5.1 Main findings

Q1. (a) *How social characteristics predict task, relational, and cognitive crafting behaviors?*

In chapter 2, a review of the current job crafting literature was presented. Through reviewing the antecedents of job crafting, I found a research limitation on how social context influences employees' task, relational, and cognitive crafting needed more investigation. Social factors could provide workers with useful information and social cues, which could motivate individuals to change their work boundaries and meet personal needs. In the current literature, most empirical studies addressed the influence of various leaderships on job crafting, especially

crafting behaviors based on the JD-R perspective. However, employees' social context not only includes leaders and managers but also involves colleagues, partners, customers, patients, and so on. Thus, I suggested that four social characteristics, including social support, interdependence, interaction outside the organization, and feedback from others, might stimulate employees' task, relational, and cognitive crafting behaviors.

Chapter 3 presented an empirical study examining how the four social characteristics were associated with different dimensions of job crafting. I proposed that both social support and feedback from others might increase individuals' task, relational, and cognitive crafting behaviors. Besides, task interdependence had the potential to motivate employees to engage in more task crafting behaviors, and interaction outside the organization might trigger workers' relational crafting. With participants' demographics (i.e., gender, age, tenure, and rank) as control variables, the hierarchical regression results showed verified the hypotheses. In particular, social support was positively related to all job crafting dimensions as expected. Moreover, interdependence was positively associated with task crafting, and interaction outside the organization could trigger employees' relational crafting behaviors as hypothesized. Regarding the impact of feedback from others, employees only had the tendency to engage in more relational and cognitive crafting behaviors. Individuals had no motivation to change their task boundaries when they received feedback from their interpersonal relationships. The possible reason for the null association may be that social feedback is more likely to influence individuals' social relations instead of their tasks. The work itself, such as feedback from the job, instead of the social context, could provide more essential job information (Morgeson & Humphrey, 2008). Thus, feedback from the job ma potentially moderates the link between feedback from others and task crafting.

Q1. (b) *How do the joint effect social context and individual differences influence employees' task, relational, and cognitive crafting behaviors?*

In chapter 2, the research gap regarding the moderating role of individual personalities was founded. Thus, I theorized that employees' personal traits and characteristics might be possible moderators in the contingency model of social factors and job crafting. According to

the interactionist theory of behavior (Sekiguchi, 2004), employees' behaviors are a joint function of the person as well as the environment. Besides, the person-environment fit theory indicates that employees tend to change their personal behaviors to perceive a satisfactory fit and meet individual preferences and needs (Sekiguchi, 2004). The theory of purposeful work behavior provides more specific theoretical foundations. According to the theory, workers with different personalities interact with task or social characteristics in the workplace to achieve fundamental goals and then experience work meaningfulness (Barrick et al., 2013).

In particular, employees with a high level of emotional stability have the tendency to strive for communion when they perceive that the workplace is fulfilled with social support, task interdependence, and interaction outside the organization. Moreover, when they receive feedback from others, they are motivated to strive for achievement. Therefore, based on the above theoretical foundations, in chapter 3, the moderating role of neuroticism personality was explored.

In chapter 3, the moderating role of neuroticism personality on the associations between social support and task crafting, between task interdependence and task crafting, between interaction outside the organization and relational crafting, and between feedback from others and task crafting, was addressed. The hierarchical regression results showed that employees with a high level of neuroticism tended to engage in more task crafting behaviors when they perceived high social support. The association between interaction outside the organization and relational crafting was stronger when employees had high neuroticism. Finally, there was a negative relationship between feedback from others and task crafting for neurotic employees. Most hypotheses received empirical supports. However, neuroticism was not a significant moderator between task interdependence and task crafting. The potential reason for this null moderating effect may be that neurotic employees are not willing to alter their task boundaries to avoid a bad influence on their colleagues' work.

Q2. (a) *How do employees' extensive and reductive crafting behaviors trigger meaningful work?*

Based on the work of literature review, previous organizational scholars have noticed the

importance and significance of the effect of job crafting on work meaningfulness (e.g., Berg et al., 2013; Wrzesniewski et al., 2013). Prior empirical studies have investigated the associations between JD-R job crafting and meaningful work (i.e., Nagy et al., 2019; Tims et al., 2016; Vermoonten, Boonzaier, & Kidd, 2019). However, the influential effects of task, relational, and cognitive crafting on meaningful work are not clear. Therefore, in chapter 4, an empirical study was designed to explore how employees' extensive and reductive job crafting behaviors facilitate meaningful work. I hypothesized that all five job crafting dimensions, including extensive task crafting, reductive task crafting, extensive relational crafting, reductive relational crafting, and cognitive crafting, had the potential to motivate employees to perceive their work as meaningful.

The hierarchical regression findings verified partial hypotheses. After controlling participants' demographics (including gender, age, tenure, and rank) and two Big Five personalities (i.e., extroversion and neuroticism), the results showed that reducing task crafting were positively related to meaningful work as expected. However, there was a negative link between reducing relational crafting and meaningful work, which was contrary to the assumption. When employees narrow their interpersonal contacts, they might limit their connections or communications with the people with whom they do not get along. Such behaviors are detrimental to group cohesion, and they may prevent employees from gaining social ties and information from others, which, in turn, decreases individuals' perception of positivity and meaningfulness.

Besides, there were no significant associations between employees' extending task crafting, extending relational crafting, as well as cognitive crafting behaviors and meaningful work. Extending task boundaries need employees to input more time and effort in specific or additional tasks, which might increase their work stress and decrease job satisfaction. Although extending task crafting may facilitate employees' self-efficacy, such behaviors could also lead to negative work outcomes, such as burnout, stress, and less job satisfaction. Thus, the positive effects and the negative effects of extending task crafting on meaningful work may counteract with each other. In addition, the direct prediction of extending relational crafting on meaningful

work is not significant and the possible reason may be the unique personality structure in Japan. Employees with a high level of agreeableness, who are motivated to connect with others, may perceive meaningfulness when extend their relational boundaries. However, the percentage of agreeable employees is rather smaller than those of other personalities. The results indicate that when considering individual differences, extensive relational crafting behavior can enhance agreeable employees' perceptions of meaningful work.

The regression results also showed that there was no prediction effect of cognitive crafting and meaningful work. The potential reason is the difference between the concepts and research items of cognitive crafting and meaningful work. First, cognitive crafting refers to employees' alteration of their cognitive work boundaries, which includes both positive and negative aspects. However, meaningful work is a eudaimonic focus (growth- and purpose-oriented), which has positive instead of negative valence. Second, meaningful work also includes positive effects on others, such as greater good motivations and meaning-making through work. The emphasis on cognitive crafting is work meanings related to personal tasks and responsibilities. Thus, in the future, researchers could find some moderators to facilitate the association between cognitive crafting and meaningful work.

Q2. (b) *How do individual differences, especially Big Five personalities, influence the effect of extensive and reductive job crafting on meaningful work?*

As individuals' personal values, motivations, and beliefs have an influential effect on employees' perception of work meanings, workers' dispositions and traits may affect their active behaviors and subjective perceptions. In addition, according to chapter 2, there has no empirical study addressing the moderating role of Big Five personalities on the relationships between job crafting and work outcomes. Thus, in chapter 4, a cross-sectional study was designed to explore the moderating effects.

In the study of chapter 4, I contended that individuals' Big Five personalities might interact with their extensive and reductive job crafting behaviors to influence meaningful work. Based on the characteristics of the Big Five personalities, conscientiousness, agreeableness, and openness to experience were selected as possible moderators. I hypothesized that, first,

conscientiousness moderated the positive relationship between extending task crafting and meaningful work and the negative relationship between reducing task crafting and meaningful work. Second, agreeableness might have moderating effects between relational crafting and meaningful work, such that the relationship between extending relational crafting and meaningful work would be positive for agreeable employees; the association between reducing relational crafting and meaningful work would be negative when agreeableness was high. Third, openness to experience might moderate the positive link between cognitive crafting and meaningful work. When engaging in cognitive crafting behaviors, employees with a high level of openness to experience have the tendency to perceive more work meaningfulness.

The empirical findings support part of the hypotheses. Agreeableness and openness to experience were significant moderators. As expected, when employees high in agreeableness expanded their relational boundaries, the prediction of extending relational crafting to meaningful work was stronger. In contrast, if employees with a high agreeableness personality limited their connections with other people, they perceived less meaningfulness. Finally, openness is also a significant moderator (involving a high and low level of openness) that can strengthen the positive relationship between cognitive crafting and meaningful work.

However, conscientiousness showed no moderating effects on the relationship between task crafting (both extensive and reductive) and meaningful work. Conscientious workers are dutiful and responsible for their tasks. They make plans to achieve work goals, and generally, these goals should be consistent with their company's objectives. However, the purpose of employees' task crafting was to meet personal preferences and needs. Thus, conscientious workers might not perceive work meaningfulness when altering their task boundaries if such proactivity was unrelated to their work goals and organizational objectives.

**Figure 8 Main findings of the current dissertation**
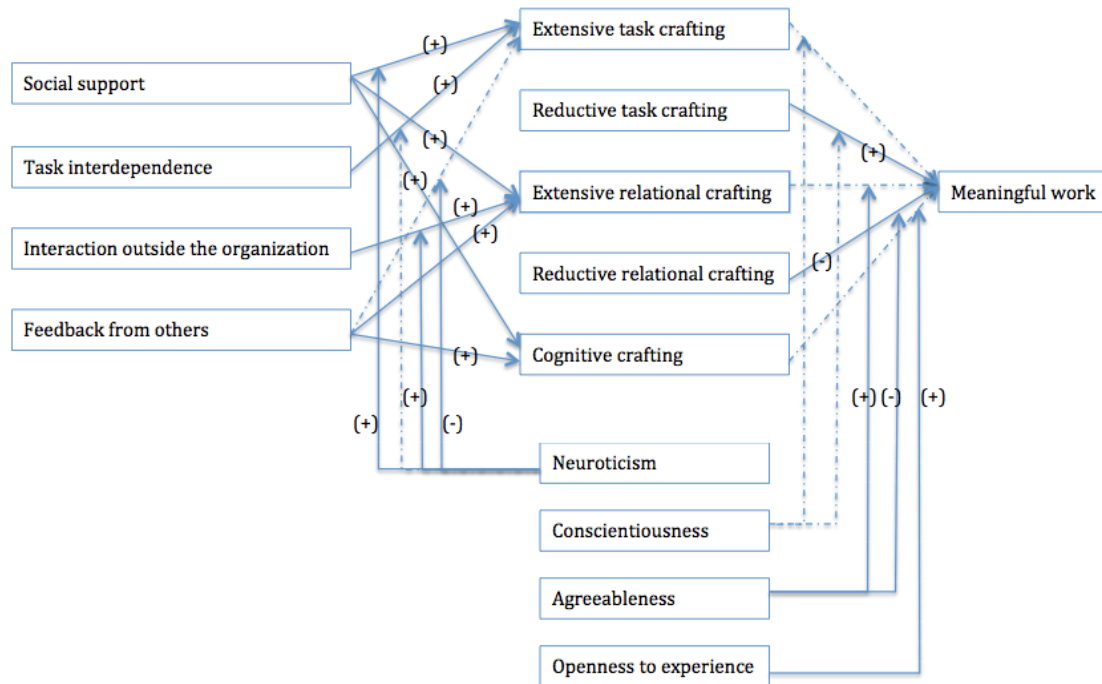


## 5.2 Theoretical contributions

### 5.2.1 Implications for job crafting literature

The current dissertation has some significant theoretical contributions to the job crafting literature. First, the present study responds to the appeal from previous organizational scholars (e.g., Grant & Parker, 2009) to investigate the influence of social environment on employees' job crafting behaviors by providing significant empirical evidence. The results offer the significant potential for enriching our insights by extending the scope of predictors of job crafting to contextual factors, especially interpersonal context factors. Specifically, it is the first study to include interaction outside the organization as one antecedent of job crafting. All four social characteristics have unique impacts on employees' crafting behaviors. In particular, social support and task interdependence can trigger task crafting; social support, interaction outside the organization, and feedback from others could facilitate employees' relational crafting; finally, social support and feedback from others encourage workers to engage in more cognitive crafting behaviors. The findings indicate that social characteristics will most influence incumbents' relational crafting behaviors.

Second, the present empirical study verified previous theoretical findings on the relationship between job crafting and meaningful work. Although previous studies (i.e., Nagy et al., 2019; Tims et al., 2016; Vermoonten, Boonzaier, & Kidd, 2019) already verified the predictions of JD-R job crafting on meaningful work or work meaningfulness, the current study is the first one to investigate how employees' extensive and reductive crafting behaviors influence meaningful work. According to the results, reductive crafting, including both reductive task crafting and reductive relational crafting, showed the strongest impact on meaningful work. When employees narrow their task boundaries, they feel less stress and experience more mental health, and in turn they feel their work as meaningful. However, employees may receive less social ties and information if they narrow their interpersonal relationships and, in turn, perceive less work meaningfulness.

Moreover, the results showed that reducing task crafting had positive rather than negative predictions for meaningful work. Thus, it is worthy to notice that reductive crafting behaviors were not always detrimental and negative. Besides, the present study shifts scholarly attention from JD-R job crafting to extensive and reductive job crafting framework.

Third, the present dissertation advances the job crafting research by investigating the moderating effects of Big Five personalities. Based on the work of the literature review, I found previous empirical study mainly applied specific individual dispositions or traits as moderators, such as demographic variables, regular focus, work orientations, self-esteem, and so on. There is no empirical study exploring the moderation effects of individual personalities. The current study is the first one to include the moderating role of the Big Five personalities.

Notably, in chapter 3, the interacting effects of social characteristics and neuroticism were highlighted and emphasized based on the purposeful work theory. The results showed that social context could help neurotic employees overcome their negative dispositions and stimulate their self-initiatives. Both social support and interaction outside the organization could encourage neurotic employees to change their task or relational boundaries. However, the results illuminated a potential downside of the feedback from others construct for individuals who have a neuroticism personality. Neurotic workers were not willing to extend

the scope or improve the quality of their work tasks when they received feedback from others. Future research could expand the current findings by investigating the joint effects of feedback from others and other personalities on job crafting.

In chapter 4, the results confirmed the significant moderating effects of agreeableness and openness to experience on the relationships between job crafting dimensions and meaningful work. Specifically, agreeableness is a significant moderator between both extending and reducing relational crafting and meaningful work. The openness personality positively moderates the relationship between cognitive crafting and meaningful work. Compared with the directed prediction effects of extensive and reductive relational crafting as well as cognitive crafting behaviors, agreeableness strengthened the positive link between extensive relational crafting and meaningful work as well as the negative relationship between reductive relational crafting and meaningful work. More importantly, there was no significant directed association between cognitive crafting and meaningful work. However, employees' personality of openness to experience assisted them to perceive work meaningfulness when they engaged in cognitive crafting. Such results reinforce the necessity and importance of the moderating role of individual personalities. Future research should notice the influence of employees' individual characteristics and personality traits when conducting job crafting studies.

## 5.2.2 Implications for meaningful work literature

Findings in the present study also generated new theoretical implications for the literature of meaningful work. First, the role of reductive job crafting is " a new predictor" of meaningful work. The current study contributes to the meaningful work literature by offering an alternative approach to enhance work meaningfulness. The empirical results respond to Lysova and colleagues' (2019) theoretical findings, such that meaningful work could be influenced by factors at the job level, including the type, quality, and amount of work, as well as job design (involving job crafting). The dissertation confirmed the predictive effect of reductive task crafting and reductive relational crafting on meaningful work. In particular, to increase work meaningfulness, engaging in more reductive task crafting is helpful. However, reducing

relational crafting was detrimental to employees' subjective experience of meaningfulness.

Second, the findings suggested that when it came to the prediction effects on meaningful work, it was worthy of considering the influences of individual personalities. As employees might show different values, motivations, and beliefs, it was necessary to encourage employees to implement distinct crafting strategies based on individual personalities to achieve work meaningfulness.

## 5.3 Practical implications

Translating the empirical findings of the current study into practical implications suggests in the first place that, in addition to designing jobs that allow for crafting, organizations and managers should create and sustain a social work environment that fosters beneficial job crafting. Employees should be given room to perceive and take advantage of social characteristics in their jobs, which could fit their personal abilities and needs. Generally, to encourage employees to alter their task boundaries, leaders could build a supportive work climate and increase the degree of workers' task interdependence. To facilitate incumbents to build new work contacts or maintain good work relations, organizations could motivate employees to provide support as well as feedback to colleagues and to increase interactions with individuals who are outside the company. In addition, encouraging employees to provide support and feedback could also assist them to increase perceptions of work meanings and identity.

Second, stimulating proactive crafting behaviors may promote employees' work meaningfulness. In the ever-changing world of work, proactively mobilizing and optimizing the work seems to be a beneficial strategy for employees to keep work experiences positive. Particularly, organizations should encourage workers and provide some freedom for workers to adjust their task scope, including narrow their task responsibilities when necessary because such behaviors could help employees to perceive positive work meaning.

Third, it should be noticed that to make the job better fits individuals' strengths, needs, and work preferences, managers should also pay attention to the employees' unique

personalities. When designing the work climate, some job characteristics may be beneficial to job crafters, while some characteristics may be detrimental to specific crafters. For example, for employees with a neuroticism personality, building a supportive climate and encourage them to communicate with others outside could be helpful to stimulate their proactivity. However, providing interpersonal work feedback should be avoided because they are sensitive, and such feedback may hurt their personal self-confidence, which is disadvantageous to their task crafting.

In addition, when aiming at enhancing job crafters' work meaningfulness, leaders should also encourage distinct crafting strategies based on crafters' unique personalities. That is, for high agreeable incumbents, the presence of extending their relational boundaries may be suitable because they have the striving for communion. However, such employees would not welcome reductive relational crafting, which is inconsistent with their personal dispositions and values, and they may perceive more work meaninglessness. For open employees, encouraging them to change the cognitive lens of their job is beneficial to increase their work meaningfulness.

Finally, for employees, the current study underscores the beneficial social context to proactively making alterations and emphasizes the positive impact of such crafting behaviors. Thus, waiting for managers to make such changes may not be sufficient to meet personal needs and experience meaningful work. In the changeable workplace, optimizing the work environment and implementing individual crafting strategies based on personal personalities seems to be a beneficial way to have good subjective experience and to meet personal needs.

## 5.4 Limitations and future research

The results and conclusions of the present dissertation should be considered alongside certain limitations. First, self-reported measures were used in both two empirical studies, which may have potential common method variance (CMV) and artificially inflated relations between variables. However, after examination, CMV between variables was not necessarily an issue. Moreover, the data in the two studies were gathered at different time points and intervals

(Podsakoff et al., 2003). The anonymous nature of the sample may also minimize this potential problem. Moreover, it is not reasonable to measure such constructs (e.g., job crafting and meaningful work) by using other-reported methods because job crafting may often be performed outside supervisors or coworkers' awareness and particularly cognitive crafting is a cognitive deliberation process, which is complicated for others to observe (Wrzesniewski and Dutton, 2001). Besides, meaningful work is based on personal perceptions. In fact, previous research supports using self-reported measures as an effective method to assess employees' proactivity (e.g., Parker et al., 2006). Therefore, using self-reported measurements is appropriate in the current study.

Second, the samples in the two empirical studies were all collected in one specific culture (Japan). There are some unique features of Japanese workplace. First, as a collectivist society, the Japanese workplace emphasizes group harmony heavily. In such culture, concerns of the in-group are put before concerns of the individual; moreover, individuals always consider what effects of his or her decisions may have on the rest of the group (Laurence, 2010). Moreover, the workplace social structure in Japan is more vertical and hierarchy-oriented (Sakuraya, Shimazu, Eguchi, Kamiyama, Hara, Namba, & Kawakami, 2017). Job crafting is an individual process, which has social aspects. Thus, Japanese employees tend to make sure that their craftings should not have conflicts with group goals. They think that individuals should take into account the expected impact of their activities on others before attempting their crafting initiatives (Laurence, 2010). Once individual crafting behaviors have the possibility to harm group harmony, Japanese employees may stop engaging in such crafting behaviors. For example, Japanese incumbents may not start reductive relational crafting when such behaviors may have a harmful effect on harmonious work relations in their group. Second, Japanese workers experience high level of workload and stress. According to the results, reductive task crafting instead of extensive task crafting predicts Japanese employees' meaningful work. The reason may be associated with the workplace features in Japan. A heavy workload always leads to high stress and anxiety. Reductive task crafting provides employees opportunities to decrease their workload and stress, in turn increase employees' perception of meaningful work. Totally,

different features in the workplace might reflect distinct work contexts. To confirm the generalizability of the findings, future research should replicate the research designs within other cultural backgrounds.

Third, in the two empirical chapters, causality was not completely established due to the collection of the research samples. Reverse causality may exist in the relationships between social characteristics and job crafting, as well as the relationships between extensive and reductive crafting and meaningful work. It is possible that when employees build and maintain interpersonal contacts, they are likely to provide valuable support and feedback to others, and they may also increase their communications and interactions with others outside. In addition, if workers benefit from meaningful work, they also have the potential to expand their network and change their views of the job. Thus, cross-lagged or longitudinal research is needed to examine whether the predictive effect of social characteristics on job crafting dimensions, the influence of extensive and reductive job crafting behaviors on meaningful work, as well as the moderating effects of individual personalities, may change over time.

Fourth, in chapter 3, only the predictions of four social characteristics and the moderating effect of neuroticism were included. Other types of social factors can be investigated. For example, future research could explore how prosocial context influences employees' job crafting strategies or how colleagues' job crafting strategies or personalities affect the employees' proactivity. Researchers could also explore the moderation effects of other individual attributes and characters, for example, the other four personalities from Big Five. Similarly, in chapter 4, only the moderating role of conscientiousness, agreeableness, and openness to experience were involved due to volume limitation. The selection of the variables should be more systematically and consistent. In future research, the moderation effects of the other two Big Five personalities, extraversion and neuroticism, should be investigated.

Fifth, Chapter 3 and Chapter 4 applied two different job crafting scales. The focus of Chapter 3 is to explore the relationship between employees' social context and the original job crafting instead of the JD-R job crafting because previous empirical studies mainly addressed the effect of social context on JD-R job crafting. In Chapter 4, based on the original job crafting

concept, I tend to investigate the influence of reductive crafting behaviors on meaningful work. Except extensive crafting, reductive crafting behaviors are also essential aspects of individual craftings. However, most job crafting scholars have ignored the reductive crafting behaviors. The extensive and reductive job crafting scale from Weseler and Niessen (2006) provides a more detailed classification of job crafting categories and emphasized the reductive job crafting. The disadvantage of applying different scales in two chapters is that it is difficult to explore the mediation effect of job crafting on the relationship between social context and meaningful work. In the future research, the possible mediation effect could be investigated.

Finally, there are some non-significant hypothesized associations in the current dissertation. There was no effective social characteristic, which could facilitate neurotic employees' cognitive crafting behaviors. Future research should explore the joint influence of other types of social context and neuroticism on cognitive crafting. Additionally, the interaction effect between expansive and/or reductive task crafting and conscientiousness is not significant for meaningful work. Future research could extend the current studies by exploring the interactive effects of task crafting and other personalities on meaningful work.

Future research can extend the present conceptual framework and findings in several ways. First, the present thesis only addressed four social characteristics as predictors of job crafting to explore influence of the broad social context and make the hypothesized model parsimonious. However, employees' social context involves other aspects except the four social characteristics, such as pro-social work context and requirements to harm others (Grant & Parker, 2009). The selection of the social predictors should be systematically in the future. Other work design categories, such as knowledge characteristics, also have potential influences on employees' crafting behaviors. Future research should include the facilitating effects of such work characteristics. The interaction effect of individual attributes and contextual antecedents should not be neglected.

Second, according to Wrzesniewski and Dutton (2001), job crafting behaviors could also have collective and negotiated forms that were team-based rather than individual-based. The current study investigated employees' job crafting behaviors at the individual level. In a team

setting, members may have more opportunities to revise, alter, and craft their relational and task boundaries in order to achieve group work improvement. In the future, scholars could address the influence of social characteristics on collaborative craftings as well as the effect of collective job crafting on individuals' perceptions of meaningful work.

Finally, as job crafting may or may not be integrated well with organizational functioning, it has the potential of negativity or to harm organizational effectiveness because it is not necessarily good or bad for organizations (Wrzesniewski and Dutton, 2001) but is sure to fit personal needs. In future research, organizational scholars could explore how to align personal job crafting behaviors with organizational goals, and it could be helpful to investigate how leaders' and colleagues' responses affect the exertion of job crafting.

**5.5 General conclusion**

As the uncertainty, complexity, and diversity of the economy have increased dramatically, most modern organizations have switched their work design strategies from designing static jobs with formalized descriptions to providing dynamic jobs with continuously changeable tasks (Petrou et al., 2017a). These economic shifts motivate organizations and managers to design advantageous work conditions and climates to encourage employees' self-initiated behaviors. Additionally, having good subjective work experience is an essential way to retain talents.

Thus, with increasingly more research interest in the influence of employees' social context and in the experience meaningful work, the current study showed that positive social environment could stimulate employees to proactively alter their task, relational, and cognitive boundaries, and such self-started behaviors indicated significant influences on workers' subjective work experience, especially perceptions of work meaningfulness. Individuals' personalities have an essential interacting impact on their crafting behaviors and their experience of work. To conclude, this dissertation entails an important step in addressing how designing the work climate in today's organizations can cultivate a well-crafting staff based on their individual personality traits. Moreover, it is notable for gaining good subjective work

experience and meaningfulness for job crafters.

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