

CRAFTING THE JOB OR THE SELF: A NEW FRAMEWORK AND EXAMINATION OF
DIFFERENTIAL PREDICTORS AND OUTCOMES OF JOB CRAFTING

By

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ABSTRACT

Job crafting, a form of redesigning work features through employees' self-initiated changes, has attracted increasing attention among management researchers and practitioners. Existing frameworks and research understand job crafting primarily from the standpoint of the job but overlook the fact that some crafting behaviors directly change the individual crafter instead of the job. Not attending to this possibility would lead to an insufficient understanding of the utility of job crafting. This dissertation intends to bridge this gap of knowledge with two investigations. First, based on the literature on job crafting, person-job fit, and work design, this dissertation proposes a new framework of *self-oriented crafting* and *job-oriented crafting* that distinguishes different targets of impact of job crafting. Second, this dissertation examines whether self-oriented crafting and job-oriented crafting are empirically distinct from each other by looking at their differential predictors and outcomes. Findings from three empirical studies provided initial evidence to support the arguments of this dissertation. Theoretical implications, recommendations for management practices, and future research directions are discussed.

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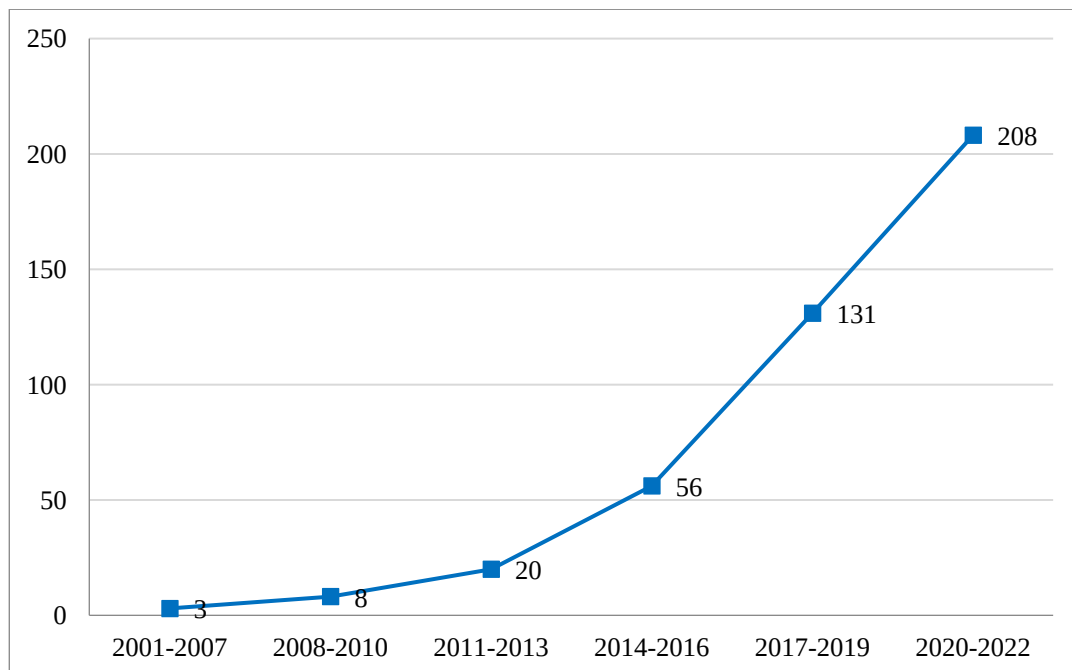
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INTRODUCTION

Job crafting, a form of redesigning work features through employees' self-initiated changes (Tims et al., 2012; Wrzesniewski & Dutton, 2001), has drawn increasing attention of management researchers and practitioners. The number of academic journal publications on job crafting has soared in recent years (see Figure 1), and meanwhile, management practitioners have promoted using job crafting as a flexible and cost-effective way to enhance employees' work experiences (e.g., Barry & Wigert, 2021; Smith & Kouchaki, 2020; Markman, 2020). It's perhaps the feature of proactivity that makes job crafting attractive to both research and practice. Unlike the traditional top-down approach of work design, job crafting represents employee bottom-up efforts in making customized changes to reshape work boundaries (Wrzesniewski & Dutton, 2001) and improve person-job fit (Tims et al., 2012).

Figure 1. The number of journal publications in English about job crafting from 2001 to 2021



Note. Data were acquired from the Proquest databases of PsycINFO and PsycARTICLE with keyword search using “job crafting” that appears in anywhere except full text.

Despite cumulative knowledge of job crafting, researchers have primarily focused on the job aspect in the person-job relationship but paid little attention to the person aspect, which could also be changed by job crafting. Major theoretical frameworks of job crafting emphasize how job characteristics are altered. For instance, job crafters are argued to change task and relational work boundaries (e.g., Niessen et al., 2016; Wrzesniewski & Dutton, 2001), regulate job demands and job resources (e.g., Petrou et al., 2012; Tims et al., 2012), and approach positive and avoid negative work stimuli (e.g., Bruning & Campion, 2018; Zhang & Parker, 2019). Nevertheless, those *job* crafting behaviors also include behaviors of crafting the individual *self*, which has been largely omitted. Through job crafting, workers can learn new skills (e.g., Bindl et al., 2019; Tims et al., 2012), manage their social networks (e.g., Tims et al., 2012; Wrzesniewski & Dutton, 2001), and reshape how they view their work and themselves in the work roles (e.g., Bruning & Campion, 2018; Wrzesniewski & Dutton, 2001). Kooij et al. (2017) also suggested that employees can craft towards their work strengths and interest. Although these crafting behaviors suggest the possibility of crafting the self, they are conceptualized through the lens of the job and are subsumed under the domain of job characteristics. Such a job-centered approach can be problematic because it mixes different targets of impact (i.e., self and job), and failure to distinguish between those targets may mask (a) other utilities of job crafting and (b) possible conceptual and empirical differences between job crafting behaviors when the targets differ.

On the one hand, job crafting is more than an alternative approach to work design; it can also be a useful tool of employee development. Job crafting is not a one-time, temporary effort (Bruning & Campion, 2018), and individuals can use job crafting not only to solve job-related issues but also to develop themselves in the long run. Employee development is defined as “the expansion of an individual’s capacity to function effectively in his or her present or future job

and work organization” (McCauley & Hezlett, 2001, p. 314). In addition to traditional methods of supporting employee development, such as training, employee-driven effort in learning and development is also critical and beneficial, as evidenced in both research and practice (Dachner et al., 2021). As Fugate et al. (2004) showed, employees can proactively improve their employability to cultivate the human capital (e.g., actively learn new skills), social capital (e.g., develop social networks), and career identity (e.g., reshape work meaning and identity), possibly through job crafting. This represents a person-centered approach but is missing in existing conceptual frameworks of job crafting.

On the other hand, there is lack of theoretical frameworks to explain why specific forms of job crafting may have specific relationships with other variables. Existing explanations of these findings (e.g., Rudolph et al., 2017) were insufficient and some even conflicted with the nature of job crafting as a proactive behavior. For instance, avoidance crafting and similar forms (e.g., decreasing hindering demands) were found to have a negative effect on work outcomes (Rudolph et al., 2017). Researchers argued that this was because avoidance crafting suggested employee withdrawal (Zhang & Parker, 2019). However, a withdrawing behavioral tendency is incongruent with the proactivity in job crafting. In addition, it remains unclear why different proactive forms of job crafting (e.g., increasing resources and increasing demands) also presented differential impacts on outcome variables (Rudolph et al., 2017). In light of this, the separation of different targets (i.e., self vs. job) of job crafting could provide a different angle to help understand the unique influences of different type of job crafting.

It is worth noting that in the broader field of work design, researchers have already pointed to the need of expanding the theoretical scope of work to include the perspective of person in addition to the job. Morgeson and Humphrey (2006) went beyond the narrower term

job design to use the term *work* design. They included a wider range of motivational elements from work environments, some of which are closely associated with the person (e.g., skill variety and task identity). In a similar vein, Parker (2014) argued for an extended perspective of work design to incorporate learning and development, both at the individual and aggregate level. In a more recent study, Parker et al. (2017) called for more attention to skill and learning, cognitive, moral, and identity development, and career and vocational issues in work design research. In a closer look at job characteristics, Ong and Johnson (in press) adopted a person-centered approach to configure job demands and resources.

Answering these calls to include the self/person aspect in the discussion of job, this dissertation foregrounds individual crafters in the conceptualization of job crafting. I aim to contribute to a refined understanding of job crafting by extending the theoretical scope and exploring the uniqueness of job crafting when its targets vary. To do so, I take the following steps.

First, I propose a new framework of job crafting that includes *self-oriented crafting* and *job-oriented crafting*. This framework distinguishes different targets of impact. Drawing on the literature of job crafting, person-job fit, and work design, I argue that job-oriented crafting directly changes work features regarding what to do and how to do, and self-oriented crafting mainly influences the job crafters themselves in terms of employability at work. This new framework defines the demarcation of two distinct types of crafting behaviors, which were largely confounded in existing conceptualizations. It also extends the theoretical scope of job crafting by considering the extra utility of job crafting to improve employee self-development. I focus on the positive and beneficial forms of job crafting (e.g., seeking resources) and exclude

dysfunctional job crafting behaviors (e.g., reducing demands) because they have been found to poorly represent the job crafting construct (Rudolph et al., 2017).

Second, I develop a measurement instrument for self-oriented crafting and job-oriented crafting. Though there are numerous existing scales of job crafting, they do not meet the needs to answer questions in this research. In addition, researchers tend to use just a few of them. While the preference over some scales suggests consensus on the operationalization of job crafting, one concern is that the content domain of job crafting might not be complete, and potentially useful information on how people craft might be missing. As existing scales were developed from different conceptual frameworks serving different research purposes, they captured unique crafting behaviors, and when put together, they provide a comprehensive description of job crafting behaviors. I thus explore the possibility of a shared theme of self-oriented crafting and job-oriented crafting among the wide range of job crafting behaviors identified in the literature.

Third, I conduct empirical tests of the theoretical insights afforded by the new framework. I examine differential predictors and outcomes of self-oriented crafting and job-oriented crafting. Considering the social context where job crafting happens, I suggest that different forms of supervisor support relate to self-oriented crafting and job-oriented crafting differently. Specifically, supervisor *emotional* support (e.g., care and concern) would be more strongly related to self-oriented crafting than to job-oriented crafting, and supervisor *instrumental* support (e.g., guidance and feedback) would be more strongly related to job-oriented crafting than to self-oriented crafting. This is because supervisor emotional support would make employees feel being valued and become willing to invest in self-development in the organization, whereas supervisor instrumental support is job-related and task-specific, thus guiding people to make changes to the job.

In addition, I test employee affective commitment to the organization and the personality trait of task-contingent conscientiousness as boundary conditions that separately moderate (a) the relationship between supervisor emotional support and self-oriented crafting and (b) the relationship between supervisor instrumental support and job-oriented crafting. Finally, I look at counterproductive work behavior (CWB) and task performance as respective outcomes of self-oriented crafting and job-oriented crafting. I suggest that self-oriented crafting, compared with job-oriented crafting, will have a stronger relationship with CWB. By contrast, job-oriented crafting, compared with self-oriented crafting, will have a stronger relationship with task performance.

In sum, this dissertation adds to existing knowledge of job crafting by proposing a new framework of job crafting (i.e., self-oriented crafting and job-oriented crafting) and by initially testing this framework to understand the differential predictors and outcomes of self-oriented crafting and job-oriented crafting.

CHAPTER 1 LITERATURE REVIEW AND CONCEPTUAL DEVELOPMENT

1.1 Two Fundamental Frameworks of Job Crafting

Two conceptual frameworks establish the theoretical basis for job crafting research. The first one was proposed by Wrzesniewski and Dutton (2001). They view job crafting as “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179). With physical changes, employees modify the types and numbers of work tasks and choose who they interact with at work; with cognitive changes, employees view the job from different angles (e.g., as a whole versus separate tasks) or interpret work purposes in their own ways. As a result, work roles, identity, and meaning are redefined. The motivation to craft comes from job crafters’ personal needs for control over the meaning of work, positive self-image, and human connections (Wrzesniewski & Dutton, 2001). Specifically, the need for control drives people to exert influence over the job and seek a feeling of ownership of the job; the desire to sustain a positive self-image motivates job incumbents to explore work meaning and identity; the need for relatedness encourages individuals to develop social connections at work.

In another perspective, Tims et al. (2012) regard job crafting as “the changes that employees may make to balance their job demands and job resources with their personal abilities and needs” (p. 174). Based on job demands-resources model (Demerouti et al., 2001), Tims et al. (2012) posited that job crafters modify job demands and job resources. Job demands refer to the aspects of jobs that require sustained physical and/or psychological effort; job resources are functional in promoting work effectiveness, personal development, and well-being (Bakker & Demerouti, 2007). Crafting those aspects of the job includes increasing structural and social job resources, increasing challenging job demands, and decreasing hindering job demands (Tims et

al., 2012). The goal is to improve person-job fit and redesign the work to be motivational (Tims et al., 2012).

While both perspectives note that unlike the traditional top-down approach of work design, job crafting demonstrates employee proactivity in initiating changes, they differ in a few ways. First, they hold different beliefs of the nature of job characteristics. Tims et al. (2012) viewed job elements (e.g., demands and resources) as static features of the job. Employee-initiated changes are relative to the predetermined job features. Changes made to those job features alter what one does and how one does in a job and lead to individual attitudinal and behavioral responses (Demerouti et al., 2001). By contrast, Wrzesniewski and Dutton (2001) believed that job elements are dynamic and change when job crafting happens. They noted that “the job is being recreated or crafted all the time” (p. 181). Thus, changes are absolute and are part of the job. They believed that there is no objective job, and job incumbents are also contributing to the work identity and meaning.

Second, the two perspectives emphasize different job crafting goals. Wrzesniewski and Dutton (2001) suggested that job incumbents would use job crafting to satisfy personal needs. The focus is on job crafters and their experiences in the job. Different from this perspective, Tims et al. (2012) focused on what and how job characteristics would be changed by employees. The purpose of job crafting is thus to make the job more favorable and fit. Individual experiences are investigated as outcomes of the redesigned job characteristics.

Third, they identified different forms of crafting behaviors. From a resource-demands perspective, Tims et al. (2012) suggest that skill development and task reduction represent meaningful crafting behaviors but are missing in Wrzesniewski and Dutton’s (2001) conceptualization. Likewise, cognitive crafting is absent from Tims et al.’s (2001) framework.

Tims and colleagues did not include cognitive crafting in their framework because they claimed that cognitive changes suggested passive adaptation rather than proactive behavior (Bakker et al., 2012), and they only considered concrete changes made to the job (Tims et al., 2012).

Given these differences, it can be difficult to do a crosswalk between job crafting behaviors identified in the two frameworks. On the one hand, some types of job crafting appear in one framework but not the other; on the other hand, ambiguity exists in job crafting behaviors that share overlaps. For instance, Tims et al. (2012) viewed “asking colleagues for advice” as increasing social job resources and regarded “minimizing contact with people whose problems influence one’s work” as decreasing hindering job demands. As those behaviors suggest making changes to the different aspects of job resources and job demands, they would all belong to relational crafting in Wrzesniewski and Dutton’s (2001) framework.

Researchers usually adopt one of these theoretical frameworks to serve their study needs. Scholars following Wrzesniewski and Dutton’s (2001) framework mainly explore the motivational process of job crafting. For instance, researchers suggest that job crafting cultivates positive work meaning and identity (Berg et al., 2013; Wrzesniewski et al., 2013) and functions as a proactive and adaptive process (Berg, Wrzesniewski, & Dutton, 2010). In addition, researchers have created training materials (e.g., Job Crafting Exercise; Berg et al., 2008) to encourage job crafting among workers, which were found effective in intervention studies (e.g., Knight et al., 2021; van Wingerden et al., 2017). While most of these studies were qualitative, some scholars also developed measurement scales (e.g., Leana et al., 2009; Niessen et al., 2016; Slemp & Vella-Brodrick, 2013) to operationalize job crafting in quantitative studies.

By contrast, researchers following Tims et al.’s (2012) framework are interested in what changes are made to the job and how such changes influence work outcomes. To achieve this

goal, job crafting scales (e.g., Petrou et al., 2012; Tims et al., 2012) were first developed from the job demands-resources model, which made it convenient for empirical studies to investigate those research questions. As a result, the nomological network of job crafting was explored, and later meta-analytical studies (e.g., Lichtenthaler & Fischbach, 2019; Rudolph et al., 2017) were able to find a generally moderate to strong correlation between job crafting and its predictors (e.g., proactive personality, job autonomy) and outcomes (e.g., job performance, work engagement, job strain). In addition, this line of research also tried to understand the variation of job crafting behaviors over time. For example, on a daily or weekly basis, job crafting relates to work engagement, task-performance, and burnout (e.g., Bakker & Oerlemans, 2019; Demerouti, Bakker, & Halbesleben, 2015; Petrou et al., 2012; Rofcanin et al., 2019), and changes in job crafting benefit work outcomes, such as engagement, adaptation, and task performance (e.g., Dubbelt et al., 2019; Petrou et al., 2018).

In sum, the two fundamental frameworks of job crafting lay the foundation of job crafting theory and greatly inspired subsequent job crafting research, but it is also noticeable that job crafting studies appeared to fall into isolating streams, leading recent effort to integrate these frameworks.

1.2 Recent Theoretical Developments of Job Crafting

Researchers proposed new strategies of job crafting to integrate the literature. Though prior research did mention how individuals craft the job, the theoretical foundation was not explicitly discussed. For instance, Wrzesniewski and Dutton (2001) argued that job crafters can change task and relational work boundaries but only provided descriptive cases of job crafting; Tims et al. (2012) suggested that job crafters can increase or decrease job resources/demands and created measurement items to represent specific crafting behaviors, but they did not explain why

increasing and decreasing are two major ways of job crafting. Recent conceptualization of job crafting tried to address this limitation.

1.2.1 A Role-Resource Approach-Avoidance Model of Job Crafting

Bruning and Campion (2018) understand job crafting through the lens of approach and avoidance motivation (Elliot, 1999, 2006). Approach motivation refers to directing behaviors toward positive stimuli, and avoidance motivation refers to directing behaviors away from negative stimuli (Elliot, 2006). Approach and avoidance motivation indicate mental processes of goals, where people are driven by positive/negative stimuli depending on their general neurobiological sensitivity to the valence of the stimulus (Elliot, 2006). In the context of job crafting, individuals can be motivated by the willingness to approach a desired end state (e.g., person-job fit, individual well-being, and job resources) or to avoid unwanted outcomes (e.g., person-job misfit, burnout, and stressors). To achieve these goals, job crafters regulate different aspects of the job by approaching the good and avoiding the bad. Accordingly, Bruning and Campion (2018) viewed crafting behaviors as approach crafting and avoidance crafting. *Approach crafting* refers to active and effortful changes made toward problem-focused and improvement-oriented goals. *Avoidance crafting* refers to reducing or eliminating the parts of one's work to evade hindering demands in task and social work boundaries.

Bruning and Campion (2018) suggested another axis of role and resource crafting. *Role crafting* refers to changing one's work roles (e.g., what one does and who one interacts with) to improve intrinsic benefits at work. Bruning and Campion (2018) argued that role crafting reflects "employee-centric adaptation" (p. 501) to the motivational function of job design by improving work meaning, identity, and enrichment. *Resource crafting* refers to managing work demands and reducing strain. Rather than being driven by intrinsic needs, individuals doing resource

crafting focus on meeting external goals to change structural components (i.e., resources and demands) of the job (Bruning & Campion, 2018). Role crafting and resource crafting respectively correspond to Wrzesniewski and Dutton's (2001) and Tims et al.'s (2012) framework.

Putting those job crafting strategies together, Bruning and Campion (2018) proposed a 2 × 2 taxonomy of job crafting that includes approach role crafting, avoidance role crafting, approach resource crafting, and avoidance resource crafting. From interviews with individuals working in various jobs and industries, Bruning and Campion (2018) identified detailed job crafting behaviors. Approach role crafting includes work role expansion and social expansion; avoidance role crafting includes work role reduction; approach resource crafting includes work organization, adoption, and metacognition; avoidance resource crafting includes withdrawal. They found that compared with approach crafting, avoidance crafting was positively related to work withdrawal and had weaker relationships with positive outcomes. This is consistent with the findings of decreasing hindering demands (a type of avoidance crafting) in Rudolph et al.'s (2017) meta-analytical study. It is noteworthy that although the idea of approach and avoidance crafting was widely adopted (e.g., Fong et al., 2021; Harju et al., 2021; Petrou & Xanthopoulou, 2020), subsequent studies rarely used the scale developed by Bruning and Campion (2018) to measure job crafting. As a result, the predictive validity of role-resource approach-avoidance crafting was not replicated, and researchers only applied the taxonomy to existing job crafting scales.

1.2.2 A Hierarchical Model of Job Crafting Strategies

While acknowledging the merit of the approach-avoidance perspective, Zhang and Parker (2019) challenged the axis of role and resource crafting. Zhang and Parker argued that role and

resource crafting have conceptual overlaps. One example is work role expansion, referring to expanding work activities to acquire useful resources. Though it is defined as role crafting, work role expansion also indicates resource crafting in terms of gaining resources. Similar issues also appear in other types of role crafting: social expansion and work role reduction not only craft roles but also manage resources at work. Such conceptual ambiguity also affects the validity of resource crafting. For instance, metacognition (i.e., cognitive activities of sense-making of one's work tasks) and withdrawal (i.e., physically or mentally withholding work effort) are resource crafting but manipulate work roles as well.

Instead, Zhang and Parker (2019) proposed a hierarchical model of job crafting that put job crafting strategies at different conceptual levels in terms of superordinate construct versus aggregate construct. A superordinate construct is manifested by interchangeable observable indicators, and an aggregate construct is composed of different and unique aspects of the content domain (MacKenzie et al., 2005). At the highest level in Zhang and Parker's (2019) model, job crafting is an aggregate construct composed of approach crafting and avoidance crafting. Approach crafting and avoidance crafting indicate different crafting orientation and are aggregate constructs encompassing behavioral and cognitive forms of crafting. Behavioral crafting means making tangible and concrete changes to the job, and cognitive crafting involves changes made to shape how one views the job (Zhang & Parker, 2019). At the lowest level in the model are crafting resources and crafting demands, serving as indicators of behavioral and cognitive crafting. Together, the hierarchical model specifies eight types of job crafting strategies that are composed of approach and avoidance orientation, behavioral and cognitive forms, and resources and demands aspects.

Zhang and Parker's (2019) framework provides a holistic view of the job crafting literature, but the hierarchical model was not clear about how job crafters would choose a specific crafting strategy. Following the hierarchical model from top to bottom, one may infer that job crafters would first choose between approach crafting and avoidance crafting, then decide on whether to make changes in a physical or cognitive way, and finally engage in job crafting to alter either (both) job resources or (and) job demands. However, such a process of decision-making was not explained. It might be possible that the proposed shape of hierarchical model would present in alternative forms, such that job crafting strategies are repositioned at levels different from their current positions. For example, job crafting may be firstly composed of resource and demands crafting, followed by approach and avoidance crafting at the next level, and finally behavioral-cognitive crafting. It remains unknown why the proposed hierarchical structure of job crafting best represents the complex decision-making process of how to craft.

1.2.3 Application of Approach and Avoidance Crafting to Other Forms

As noted above, the framework of approach and avoidance crafting led researchers to relabel existing forms of job crafting. Researchers categorized descriptions of job crafting from existing job crafting scales into approach crafting and avoidance crafting (e.g., Fong et al., 2021; Harju et al., 2021; Mäkikangas, 2018; Petrou & Xanthopoulou, 2020). For Tims et al.'s (2012) scale, increasing structural job resources, increasing social job resources, and increasing challenging demands were viewed as approach crafting, and decreasing hindering demands was viewed as avoidance crafting. Similarly, for Petrou et al.'s (2012) scale, seeking resources and seeking challenges were viewed as approach crafting, and reducing demands was viewed as avoidance crafting. Approach and avoidance crafting were also applied to Wrzesniewski and Dutton's (2001) framework. Lazazzara et al. (2020) suggested that individuals can engage in

either an approach or avoidance type of job crafting when making changes to the task, relational, and cognitive work boundary. For instance, approach task crafting included adding extra tasks, adopting new technologies, and creating innovative practices; avoidance relational crafting included social reduction, ignoring a customer, and cutting down meeting time.

Research has found support to the application of approach and avoidance crafting to other forms of job crafting. Bipp and Demerouti (2015) found that people with an approach temperament tend to seek resources and demands but do not reduce demands. On the contrary, people with an avoidance temperament would reduce demands but do not seek resources and demands. This is possibly because job resources and challenging demands can be a source of positive stimuli for individuals to pursue, while excessive demands may be viewed as negative stimuli that individuals want to stay away from. Indeed, job resources and challenging demands are related to positive work outcomes and individual well-being, but excessive demands can have negative influences (e.g., Bakker & Demerouti, 2007; Bakker, Demerouti, & Verbeke, 2004; Demerouti et al., 2001; Mauno et al., 2007; van den Broeck et al., 2010). Using latent profile analysis, Mäkikangas (2018) identified two groups of job crafters: passive and active job crafters. Whereas passive job crafters tend to decrease hindering demands but not increase job resources or demands, active job crafters use all types of job crafting. Although this finding was different from the expectation of active job crafters using only approach crafting, Mäkikangas (2018) explained that active job crafters are healthy, proactive, and energetic workers who utilize all possible approaches to modify work features. Together, these findings suggest that approach and avoidance crafting are distinct methods individuals use to craft their jobs.

1.2.4 Promotion-oriented Crafting and Prevention-oriented Crafting

Bindl et al. (2019) developed another framework based on regulatory focus theory (Higgins, 1997). They argued that promotion-oriented and prevention-oriented job crafting are two distinct strategies employees use to modify the skill, task, relational, and cognitive aspects of the job. Regulatory focus theory suggests that promotion focus and prevention focus are two strategic principles people follow to achieve the goal of approaching pleasure and avoiding pain. Promotion focus refers to the intention to gain achievements and get closer to the goal, and prevention focus refers to the intention to take precautionary measures to reduce the risk of distancing people from the goal. The two basic principles represent different strategies of goal pursuit. Take college professors as an example. To approach pleasure (e.g., publishing journal articles, receiving grants, and getting tenure), college professors can increase their effort in academic activities (promotion-focus actions) and/or reduce time for vacation (prevention-focus actions); to avoid pain (e.g., rejections from academic journals), they can improve research competency (promotion-focus actions) and/or scrutinize scholarly work (prevention-focus actions).

Promotion and prevention focus show one's tendency of adopting different job crafting strategies. Like Wrzesniewski and Dutton (2001), Bindl et al. (2019) proposed that basic human needs would influence job crafting behaviors. They found that the need for autonomy, relatedness, and competence (Ryan & Deci, 2000) predicted some but not all types of job crafting. For example, the need for autonomy was only related to promotion-oriented task and cognitive crafting; the need for relatedness predicted promotion- and prevention-oriented relational crafting and prevention-oriented cognitive crafting; the need for competence was only related to promotion- and prevention-oriented skill crafting and prevention-oriented cognitive

crafting. These findings also suggested that different types of job crafting will have differential relationships with the same underlying variable. An earlier study by Brenninkmeijer and Hekkert-Koning (2015) found that people with a promotion focus tend to increase structural and social job resources and increase challenging work demands, but people with a prevention focus tend to reduce hindering job demands. In another study, Petrou et al. (2018) showed that people with a promotion focus were more likely to increase effort in seeking resources and challenges when the quality of organizational change communication was high, but people with a prevention focus were less likely to increase their effort in seeking challenges.

It is important to note that although regulatory focus and approach and avoidance motivation share conceptual overlaps, they explain behaviors at different theoretical levels. The theory of approach and avoidance motivation is a *system*-level theory, whereas regulatory focus theory describes motivational mechanism at the *subsystem* level. Vancouver (2005) noted that a system-level theory explains how properties of a system (e.g., a person) relate to each other, and a subsystem-level theory explains how within-system mechanisms function to influence the system of interest. The theory of approach and avoidance motivation suggests that approaching pleasure and avoiding pain are common goals that explain individual behaviors, but regulatory focus theory focuses on the strategy (i.e., promotion and prevention) one may use to achieve the goal of approaching pleasure and avoiding pain. Hence, regulatory focus theory explains the mechanism at the subsystem level rather than at the system level (Ferris et al., 2013). Unlike the theory of approach and avoidance motivation that explains *why* people are driven toward a particular desired end state (i.e., at the system level), regulatory focus theory describes *how* people pursue desired end states, which is at the strategic level (i.e., the subsystem level) within the system of an individual. In addition, approach and avoidance motivation reflect causal

relationships between positive/negative stimuli and behaviors, but regulatory focus indicates a noncausal structure where people can adopt either a promotion or prevention method to achieve goals (Ferris et al., 2013). In the case of job crafting, at the system level, one may consider how individual variables, such as personal needs (Wrzesniewski & Dutton, 2001), influence job crafting behaviors, but at the subsystem level (i.e., within-person mechanism), crafting behaviors can be studied as a process of individual proactivity and adaptivity (Berg, Wrzesniewski, & Dutton, 2010).

Therefore, promotion-oriented crafting and prevention-oriented crafting uncover new contents of job crafting behaviors. Bindl et al. (2019) argued that with promotion-oriented crafting, job crafters are driven by aspirations and accomplishments and add to existing job contents. Examples are expanding meaningful work contacts, participating in new projects, seeking opportunities to learn new skills, and gaining different ways to view one's job. With prevention-oriented crafting, job crafters focus on responsibilities and safety and diminish unfavorable aspects of jobs. Examples are managing only trusted relationships, maintaining effort in core tasks, optimizing expertise, and considering only the good aspects of one's job. While promotion-oriented crafting has overlaps with approach crafting, as they both suggest that job crafters bring in effort to augment personal and job characteristics, prevention-oriented crafting is rather different from avoidance crafting. Prevention-oriented crafting reflects employee proactivity as it demonstrates a tendency of devoting effort to maintain current working states instead of withholding effort as shown in avoidance crafting (Bindl et al., 2019; Zhang & Parker, 2019).

1.3 The Limitation of Existing Theoretical Frameworks of Job Crafting

From this review, it is noticeable that existing theoretical frameworks of job crafting focus on changes made to the job. Job crafters make physical and cognitive changes to the task and relational work boundaries (Wrzesniewski & Dutton, 2001), alter job resources and job demands (Tims et al., 2012), approach and avoid certain job resources and roles (Bruning & Campion, 2018), and regulate different aspects (e.g., task and relationship) of the job through promotion and prevention (Bindl et al., 2019). However, these discussions neglect the fact that job crafting could also directly change oneself. Though the term of job crafting literally suggests that the job is the target, some job crafting behaviors, such as skill crafting, relational crafting, and cognitive crafting, directly reshape personal rather than job characteristics. Such a difference may be nuanced, but it provides additional yet critical information on the utility of job crafting, which could be otherwise masked if only the job is conceptualized as the target of job crafting. For example, job crafters may proactively upgrade work skills, manage social connections at work, and adjust their understanding of the work meaning. These internal crafting efforts can facilitate employee development. By contrast, job crafters who change job features, such as workloads, schedules, and work methods, directly influence how the job is accomplished. These crafting behaviors target at external requirements by the context (e.g., job). In comparison with changes made to the person, changes made to the job may have a more immediate influence over work outcomes.

Therefore, it is meaningful to specify both the self and the job as two different targets of job crafting. Based on existing conceptualizations, I provide another definition of job crafting that include crafting behaviors toward the self and the job: *Job crafting refers to employee-initiated behaviors that proactively change job characteristics and personal functionality at*

work. In what follows, I review job crafting as a proactive behavior to show that the self and the job are two available targets of proactive behaviors and then review measurement of job crafting to show that changes made to the self and to the job are mixed in existing scales.

1.4 Job Crafting as Proactive Behavior

Proactive behavior is defined as “taking initiative in improving current circumstances or creating new ones” (Crant, 2000, p. 436). The main features of proactive behavior are self-starting, future focused, and change oriented (Parker et al., 2006). Many workplace behaviors are proactive, such as personal initiative, taking charge, voice, idiosyncratic deals, and job crafting. In those behaviors, individuals show proactivity as they change the status quo instead of following prescriptions (Parker et al., 2010). Researchers understand proactive behaviors from five major aspects (Grant & Ashford, 2008): target of impact, form, tactic, frequency, and timing. Target of impact refers to on whom or what the behavior is intended to influence. Form refers to the type of individual behaviors. Tactic refers to behavioral strategy or method. Frequency refers to whether and how often proactive behavior happens. Timing refers to the degree to which the behavior happens at a particular occasion or moment. Grant and Ashford (2008) recommended researchers consider these dimensions to get a full description of proactive behaviors, and they cautioned that overlooking a dimension would omit critical information of the nature, causes, processes, and consequences of the proactive behavior.

Next, I follow this five-dimensional model to compare job crafting with other relevant proactive behaviors, including personal initiative, task revision, voice, and idiosyncratic deals, to show that the self and the job are two targets of proactive behaviors. Table 1 summarizes this comparison.

Table 1. Comparison of different types of proactive behaviors

Dimensions of proactive behavior	Job crafting	Personal initiative	Taking charge	Voice	Idiosyncratic deals
Target of impact	The self (e.g., skills, work relations, and views) and the job (e.g., tasks, work methods, and outcomes)	Multiple aspects of the job including tasks, work methods/procedures, and organizational policies	Multiple aspects of the job including tasks, work methods/procedures, and organizational policies	Multiple aspects of the job including tasks, work methods/procedures, and organizational policies	The self (e.g., developmental opportunities) and the job (e.g., tasks, work methods, and outcomes)
Form	Behavioral or cognitive	Behavioral	Behavioral	Verbal	Behavioral
Tactic	Approach/avoidance crafting, seeking resources/demands, crafting toward strength/interest, etc.	Prevention, problem-solving	Not specified	Interpersonal interaction or cooperation	Negotiation
Frequency	Daily, weekly, or at longer time intervals	Not specified	Not specified	As needed	As needed
Timing	When there is perceived person-job misfit	Not specified	Observation of faulty work procedures and anticipation of development needs	After weighing expected costs and benefits and the likelihood of success	Usually during the recruitment process, but can also happen on the job

1.4.1. Personal Initiative

Personal initiative refers to employees actively going beyond what is required in a job to address work and organizational issues (Frese & Fay, 2001; Frese et al., 1996). There are three important features of personal initiative: self-starting, proactivity, and persistence (Frese et al., 2007). Self-starting suggests that personal initiative is goal-directed and action-oriented rather than being compelled by external instructions and role requirements (Frese et al., 1996; Frese et al., 2007). The proactivity in personal initiative is manifested by individuals' planned actions toward long-term goals instead of waiting until problems or demands occur (Frese et al., 1996; Frese et al., 2007). Persistence shows that individuals do not quickly give up in the face of barriers and setbacks (Frese et al., 1997). Evidence from meta-analysis (Tornau & Frese, 2013) has shown that proactive personality is strongly correlated with personal initiative ($\rho = .71$), and in comparison with other Big Five personality traits, conscientiousness ($\rho = .38$) and extraversion ($\rho = .33$) showed stronger correlations with personal initiative.

Personal initiative presents in behavioral forms and targets at the job to solve problems. Examples include employees actively solving a problem, searching for solutions when things go wrong, and using opportunities to realize ideas and goals (Frese et al., 1997). Thus, personal initiative is consistent with organizational goals and missions (Frese et al., 1996). Organizations can benefit from personal initiative because it solves or prevents work and organizational issues. Personal initiative was found to be positively correlated with performance and attitudinal outcomes, such as job performance, innovation, job satisfaction, and commitment (Tornau & Frese, 2013). In addition, personal initiative is viewed as contextual behaviors in that the actions usually go beyond job requirements. Though research was not specific about the frequency and timing of personal initiative, it can happen when one plans for future actions (Frese et al., 1996;

Frese et al., 2007). In addition, when there is high job autonomy, employees are more likely to take personal initiative (Tornau & Frese, 2013).

1.4.2 Taking Charge

Taking charge is defined as employees' voluntary, discretionary, and constructive effort to change the way work is executed, thus enhancing organizational functionality (Morrison & Phelps, 1999). Taking charge is different from personal initiative in a few ways. First, taking charge stresses on making changes and improvement (Morrison & Phelps, 1999), but personal initiative includes a broader range of extra-role behaviors. Second, unlike personal initiative, taking charge does not emphasize persistence in the face of difficulties (Tornau & Frese, 2013). Third, taking charge happens by situation, but personal initiative is a relatively stable behavioral tendency (Morrison & Phelps, 1999). The shared theme is that like personal initiative, taking charge also aims to benefit the organization through changes made to jobs, work units, and organizations. Meta-analytical results (Tornau & Frese, 2013) have shown that in comparison with personal initiative, taking charge has a relatively weaker correlation with proactive personality ($\rho = .45$) and Big Five personality traits (varying from .02 to .17). Taking charge was also associated with job performance, job satisfaction, and commitment (Tornau & Frese, 2013).

Taking charge takes behavioral forms and targets at various aspects of one's work, including personal work experiences, job tasks, and work procedures. Both the person who takes charge and the job can be influenced. In addition, one may need to work together with others when taking charge to improve work methods, policies, and procedures. The literature was not specific about when and how often taking charge occurs. As taking charge is change-oriented, it could be inferred that taking charge may happen when changes are needed either internally or externally. For instance, a person may observe faulty work procedures and try to revise them

(Staw & Boettger, 1990), or in another situation, a worker makes innovations to support the long-term development of the organization.

1.4.3 Voice

Voice refers to the expression of innovative and constructive suggestions to improve rather than criticize standard work procedures (LePine & Van Dyne, 1998; Van Dyne & LePine, 1998). Two features are worth noting. First, voice behavior emphasizes verbal communication of ideas, suggestions, opinions, challenges, and concerns (Morrison, 2011). Second, the motive behind voice behavior is to help the organization or work unit (Morrison, 2011). Therefore, voice behavior is beyond the scope of prescribed job descriptions and aims to improve work practices. Recent meta-analytical study (Chamberlin et al., 2017) suggested that individual differences (e.g., proactive personality, Big Five personality traits, and core self-evaluation) had small to moderate correlations with voice, among which the disposition of personal initiative showed the strongest relationship ($\rho = .40$). In addition, voice was found to be strongly correlated with felt responsibility ($\rho = .55$) and moderately correlated with work and attitudinal outcomes, such as job performance ($\rho = .30$), engagement ($\rho = .38$), and job satisfaction ($\rho = .20$). In comparison with personal initiative and taking charge, voice showed a stronger relationship with subjective performance (Thomas et al., 2010).

The primary target of voice is the job. Workers use voice to express concerns over workplace environments, policies, and procedures that influence the organization and its members. Yet engagement in voice behaviors is discretionary. Individuals choose to voice or not, depending on a variety of factors, such as organizational culture, supervisor openness, job positions, and job attitudes (Morrison, 2011). Individuals will evaluate the efficacy in voice by weighing the benefits against potential risks (Morrison, 2011). Voice behavior is also socially

based and cooperative as it provides constructive change suggestions to another party (e.g., supervisor, coworker, and organization) and develops collective understanding of pre-emptive solutions (Thomas et al., 2010). Hence, an interactional party is essential to voice behavior.

1.4.4 Idiosyncratic Deals

Idiosyncratic deals (i-deals) are “voluntary, personalized agreements of a nonstandard nature negotiated between individual employees and their employers regarding terms that benefit each party” (Rousseau et al., 2006, p. 978). To get i-deals, a person bargains for customized work arrangements (e.g., flexible work schedule, career development opportunities, workloads, or personalized work tasks) either during the recruitment process or on the job (Hornung et al., 2010; Rousseau & Kim, 2006). The main tactic of i-deals is negotiation. I-deals represent formal agreement between the employee and the organization. As a result, negotiated terms in i-deals can guarantee the mutual benefit of the person and the organization. The contents of i-deals target at both the person and the job, trying to create customized job features and work roles. Research has shown that i-deals positively relate to affective commitment and job satisfaction but negatively relate to turnover intention (Liao et al., 2016). Leader-member exchange was found to have a moderate to strong correlation with i-deals ($\rho = .33$, Liao et al., 2016), suggesting that the social exchange relationship between the supervisor and the employee is important to i-deals. Personal initiative was found to predict flexibility and developmental i-deals (Hornung et al., 2008), and people with high political skills or emotional intelligence tend to successfully negotiate i-deals (e.g., Huang & Niu, 2009; Rosen et al., 2013). I-deals were also found to relate to various outcome variables, such as job satisfaction (e.g., Rosen et al., 2013), organizational citizenship behavior (e.g., Anand et al., 2010), and work-family conflict (e.g., Hornung et al., 2008).

1.4.5 Job Crafting

Job crafting indicates proactivity. Wrzeniewski and Dutton (2001) noted that job crafting describes employees initiating changes to shape work boundaries. Tims et al. (2012) argued that the essential feature of job crafting is proactively modifying job characteristics. Similarly, Bruning and Campion (2018) argued that job crafting reflects volitional, conscious, and intentional changes. These arguments were supported by meta-analytical evidence that showed a strong correlation ($\rho = .54$) between proactive personality and job crafting (Rudolph et al., 2017). Job crafting is also moderately to strongly correlated with other individual characteristics, such as agreeableness ($\rho = .27$), general self-efficacy ($\rho = .40$), and promotion focus ($\rho = .51$).

Job crafting can happen not only in behavioral forms but also in cognitive forms. This is different from other discussed proactive behaviors, which do not have cognitive forms. Thus, a unique function of job crafting is through cognitive crafting that alters the psychological process of the person rather than making concrete changes to the job. Similarly, some other crafting behaviors, such as learning new skills and expanding social connections, also directly shapes the job incumbent instead of job features. Including the self as a target of impact is consistent with the argument of the individual being the primary beneficiary of job crafting (Bruning & Campion, 2018). Workers use job crafting to benefit themselves (Bruning & Campion, 2018) and are motivated by personal needs (Wrzeniewski & Dutton, 2001). By contrast, personal initiative, taking charge, and voice are prosocial and aim to improve organizational functionality. Though employees seek i-deals to meet personal needs as well, i-deals benefit both the person and the organization (Rousseau et al., 2006), because the employer can use i-deals to attract, motivate, and retain the work force (Liao et al., 2016). In addition, i-deals are negotiated terms and agreement over work arrangements, whereas job crafting is informal and does not need approval

from the management. Job crafting may thus potentially hurt the interest of the organization when there are conflicting goals (Wrzesniewski & Dutton, 2001), as the crafted job contents reflect what one wants from the job but do not necessarily indicate what the organization desires.

In addition, empirical studies also examined the frequency and timing of job crafting. For frequency, the engagement level of job crafting can vary daily (e.g., Bakker & Oerlemans, 2019; Demerouti, Bakker, & Halbesleben, 2015; Petrou et al., 2012), on a weekly basis (e.g., Petrou et al., 2017; Rofcanin et al., 2019; Tims et al., 2016), or at longer time intervals, such as several weeks or months (e.g., Hulshof et al., 2020, Study 1; Petrou et al., 2018; Vogt et al., 2016). For timing, empirical studies tested the conditions of job crafting behaviors. Breevaart and Tims (2019) found that on a daily basis when individuals perceived low job insecurity, they tend to proactively craft social resources as response to exhaustion. Thun and Bakker (2018) found that when empowering leadership was high versus low, optimistic employees became more likely to increase structural job resources and challenging job demands but did not engage in increasing social job resources or decreasing hindering demands. Dust and Tims (2020) found that individuals perceiving misfit in the needs and supplies of task interdependence would decrease hindering demands, but this phenomenon became insignificant when autonomy was low.

In conclusion, from the perspective of proactive behavior, a missing piece of the puzzle in the job crafting literature is the dimension of target of impact. Different targets of impact are obscured in existing studies, and ambiguity exists in what “job” means in the context of job crafting. By explicitly theorizing the self and the job as two respective targets of impact, I intend to view job crafting from both the perspectives of the self and the job to understand the utility of job crafting. This is consistent with the key proposition underlying job crafting theory that job crafters aim to ensure person-job fit (Dust & Tims, 2020; Tims et al., 2012; Wrzesniewski &

Dutton, 2001). Next, I review measurement of job crafting and show that the target of the self is confounded with the target of the job in measurement items.

1.5 Measurement of Job Crafting

Researchers have created numerous scales to measure job crafting. Table 2 summarizes major job crafting scales in the literature. As I will show in the following sections, some items used to operationalize job crafting describe behaviors that directly change the job crafters themselves.

Table 2. Summary of major job crafting scales

Scale	Type	Source	Framework	Aspects of the job	Crafting strategies
Tims et al. (2012)	Original scale, generic, multidimensional	Tims et al. (2012)	Job demands-resources	Job demands and job resources	Increasing vs. decreasing
Petrou et al. (2012)	Adapted scale, generic, multidimensional	Tims et al. (2012)	Job demands-resources	Job demands and job resources	Seeking vs. reducing
Slemp & Vella-Brodrick (2013)	Original scale, generic, multidimensional	Wrzesniewski & Dutton (2001)	Work roles and work meaning	Task, relational, and cognitive work boundaries	Not specified
Niessen et al. (2016), Wesler & Niessen (2016)	Original scale, generic, multidimensional	Wrzesniewski & Dutton (2001)	Work roles and work meaning	Task, relational, and cognitive work boundaries	Not specified
Bruning & Campion (2018)	Original scale, generic, multidimensional	Wrzesniewski & Dutton (2001), Tims et al. (2012)	Approach and avoidance motivation	Work roles and resources	Approach vs. avoidance
Bindl et al. (2019)	Original scale, generic, multidimensional	Wrzesniewski & Dutton (2001), Tims et al. (2012)	Regulatory focus	Skill, task, relational, and cognitive work boundaries	Promotion-oriented vs. prevention-oriented
Leana et al. (2009)	Original scale, contextualized, unidimensional	Wrzesniewski & Dutton (2001)	Work roles and work meaning	Task work boundary	Not specified
Nielsen and Abildgaard (2012)	Adapted scale, contextualized, multidimensional	Tims et al. (2012)	Job demands-resources	Job demands	Increasing vs. decreasing
Kooij et al. (2017)	Original scale, generic, multidimensional	Wrzesniewski & Dutton (2001)	Person-job fit	Task work boundary	Crafting toward strengths vs. crafting toward interests
Demerouti & Peeters (2018)	Original scale, generic, unidimensional	Tims et al. (2012)	Job demands-resources	Job demands	Optimizing vs. minimizing

1.5.1 Scales Developed from the Two Fundamental Job Crafting Frameworks

The most widely used job crafting scale was developed by Tims et al. (2012). Based on job demands-resources model (Demerouti et al., 2001), Tims et al. (2012) proposed that job crafters can increase job resources, increase challenging job demands, and decrease hindering job demands. Their empirical test of the factor structure suggested four underlying factors, and Tims and colleagues separated the dimension of increasing job resources into increasing structural job resources and increasing social job resources. The finalized scale includes 21 items assessing four dimensions.

The dimension of increasing structural job resources includes measurement items that are about making changes to the self. Example items are “I try to develop my capabilities”, “I try to develop myself professionally”, and “I try to learn new things at work”. By contrast, other dimensions are about changes made to the job. For example, the item of “I regularly take on extra tasks even though I do not receive extra salary for them” suggests behaviors of increasing challenging job demands.

Another commonly used job crafting scale was developed by Petrou et al. (2012). The scale was adapted from Tims et al.’s (2012) scale to measure day-level and general-level of job crafting. This brief version (13 items) of measurement includes three dimensions of crafting: seeking resources, seeking challenges, and reducing demands. These types of job crafting correspond to the original three-dimensional structure in Tims et al.’s (2012) study. Adopting the approach and avoidance crafting framework, researchers using the scale created by Tims et al. (2012) and Petrou et al. (2012) also view decreasing hindering job demands and reducing demands as avoidance crafting and other types as approach crafting. A problem is that the items measuring seeking resources mixed the target of the self and the job. For example, the item of “I

try to learn new things at work” is about the individual crafter, but the item of “I contacted other people from work (e.g., colleagues, supervisors) to get the necessary information for completing my tasks” is about the job.

Although job crafting was first conceptualized by Wrzesniewski and Dutton (2001), a measurement instrument of job crafting based on their framework was not developed until Slemp and Vella-Brodrick’s (2013) Job Crafting Questionnaire. The impetus for creating this scale was to measure cognitive crafting, which was not included in prior scales. Slemp and Vella-Brodrick (2013) concurred with the value of cognitive crafting because it represents a unique way of changing one’s experience at work. In addition, a measurement instrument of cognitive crafting can inspire other research topics (Slemp & Vella-Brodrick, 2013). The Job Crafting Questionnaire includes 15 items that measure task crafting, relational crafting, and cognitive crafting. The items measuring cognitive crafting describe one’s effort in reshaping their views of the job. Example items include “Think about how your job gives your life purpose”, “Remind yourself about the significance your work has for the success of the organization”, and “Reflect on the role your job has for your overall well-being”. These items are about changing job crafters’ understanding of work meaning and do not directly alter concrete job characteristics.

In another effort, Niessen et al. (2016) also followed Wrzesniewski and Dutton’s (2001) framework and developed a scale to measure job crafting. The results of exploratory and confirmatory factor analysis supported the proposed three-factor model. One limitation is that the task crafting dimension only focused on adding but not reducing tasks. The empirical results also showed varying internal consistency scores across measurement occasions. A later study by Weseler and Niessen (2016) addressed these issues with five additional items: three items measuring reduced task crafting and two items measuring reduced relational crafting. They

found support to a five-factor structure of job crafting that includes extended task crafting, reduced task crafting, extended relational crafting, reduced relational crafting, and cognitive crafting. Like Tims et al. (2012), Weseler and Niessen (2016) also distinguished between the method of increasing and decreasing. Thus, the extended and reduced forms of job crafting in Weseler and Niessen's (2016) scale can be respectively viewed as approach and avoidance crafting.

In those scales developed by Niessen and colleagues, items measuring the cognitive crafting dimension indicate changes made to the person, such as "I view my tasks and responsibilities as being more than just part of my job" and "I try to look upon the tasks and responsibilities I have at work as having a deeper meaning than is readily apparent".

1.5.2 Scales Developed from Recent Theoretical Frameworks

Researchers developed measurements based on recent theoretical frameworks as well. As discussed, Bruning and Campion (2018) proposed a role-resource approach-avoidance model of job crafting. Using an inductive approach from interviews with working professionals, they identified seven unique types of crafting behaviors from a wide range of jobs and work contexts. Those job crafting behaviors can be categorized into role-resource and approach-avoidance crafting. *Approach role crafting* includes work role expansion (i.e., enlargement of work roles beyond job descriptions) and social expansion (i.e., proactive use or provision of social resources); *avoidance role crafting* includes work role reduction (i.e., proactively reducing work roles, requirements, and effort). *Approach resource crafting* includes work organization (i.e., active design of structures to organize tangible elements of work), adoption (i.e., active use of technology and other knowledge toward goals to influence work process), and metacognition (i.e., task-related cognitive activities of organization, sensemaking, and change of psychological

states); *avoidance resource crafting* includes withdrawal crafting (i.e., systematic removal of oneself from work situations either mentally or physically). In total, there are 30 items in Bruning and Campion's (2018) scale to measure different types of job crafting.

Whereas some crafting strategies in Bruning and Campion's (2018) scale are about changes made to the job, other crafting strategies are about changes made to the self. Items measuring work role expansion are about the job, such as "Expand my work activities to make sure I take care of myself". By contrast, items measuring metacognition (e.g., "Use my thoughts to get me out of a bad mood at work") describe changes made to the self. In other job crafting dimensions, the target of the self and the job is mixed. For instance, adoption is measured with items focusing on both the self (e.g., "On my own, seek training on new technology") and the job (e.g., "Use new knowledge or technology to automate tasks"). Similarly in the dimension of social expansion, crafting behaviors that "actively develop my professional network at my job" target at the self, while the behavior that "actively initiate positive interactions with others at work" targets at the job.

The scale developed by Bindl et al.'s (2019) aimed to explain why and how people craft the job. They introduced promotion-oriented and prevention-oriented crafting based on regulatory focus theory. They argued that the literature emphasized much on expansive forms of crafting but paid little attention to the prevention-oriented activities in job crafting. In addition, they tried to include important conceptual domains from both the work of Wrzesniewski and Dutton (2001) and Tims et al. (2012). Accordingly, they argued that promotion-oriented crafting and prevention-oriented crafting can apply to the skill, task, relational, and cognitive aspect of the job. Using a deductive approach, Bindl et al. (2019) drew items from established scales of job crafting and developed new items to represent the proposed dimensions of job crafting. The

final version of the scale contains 28 items measuring eight types of job crafting. Bindl et al. (2019) found support to the extended framework based on evidence from confirmatory factor analysis and empirical results of promotion-oriented and prevention-oriented crafting having differential relationships with basic human needs and innovative work performance.

The dimension of skill crafting and cognitive crafting in Bindl et al.'s (2019) scale describe behaviors that change personal features and functionality at work. Example items are “I tried to learn new things at work that went beyond my core skills” and “I focused my mind on the best parts of my job, while trying to ignore those parts I didn't like”.

1.5.3 Scales Developed for Specific Research Purposes

There are other scales customized for specific research questions. Based on Wrzesniewski and Dutton's (2001) framework, Leana et al. (2009) developed a unidimensional job crafting scale to measure individual and collaborative crafting in the context of teachers at childcare centers. Items were contextualized to reflect teachers' work, such as rearranging equipment or furniture in the play areas and organizing special events in classrooms. This 6-item scale can be rephrased to measure collaborative crafting that focuses on crafting activities in collaboration with coworkers in the classroom. They found that discretion and career orientation predicted individual crafting, whereas discretion, interdependence, supportive supervision, and social ties predicted collaborative crafting. This suggests that compared with individual crafting, collaboration with others to craft jobs has stronger links with the social contact at work. In addition, Leana et al. (2009) found that while both individual and collaborative crafting were related to the quality of care and job satisfaction, only collaborative crafting predicted organizational commitment. Moreover, engagement in collaborative crafting was found to be beneficial, as low experience teachers appeared to perform better quality of care and high

experience teachers had lower turnover intention. These findings showed the value in collaborative crafting.

In another effort, Nielsen and Abildgaard (2012) adapted Tims et al.'s (2012) scale to measure job crafting behaviors of blue-collar workers. They created items from interviews with Danish mail delivery workers. The scale measured five aspects of job crafting, including increasing social job resources, increasing challenging job demands, increasing quantitative job demands, decreasing social job demands, and decreasing hindering job demands. In comparison with Tims et al.'s (2012) scale, this scale did not include increasing structural resources but added the dimensions of increasing quantitative job demands and decreasing social job demands to illustrate the context of blue-collar work, where workers actively maintain occupational health. They found that increasing quantitative job demands was positively related to work engagement and job satisfaction but not significantly related to burnout. By contrast, decreasing social job demands was not related to either well-being outcome. The insignificant influence of decreasing social job demands was consistent with the findings of decreasing forms of crafting in prior studies (e.g., Tims et al., 2012), which suggested that the more nuanced decreasing social job demands may not explain extra variance in outcome variables over and beyond decreasing hindering demands.

Another scale was developed by Kooij et al. (2017) with the intention to understand how people take advantage of their personal characteristics to improve fit to the job. They introduced two novel types of job crafting: crafting toward strengths and crafting toward interests. Crafting toward strengths refers to changes made to work tasks that best utilize personal strengths (i.e., unique characteristics that allow one to best perform; Wood et al., 2011), and crafting toward interests reflects changes made to work tasks that best match personal interests (i.e., things in

which one is motivated to invest energy and time; Kandler et al., 2014). Both types of job crafting depict the effort of applying job crafting to promoting individual preferences over job contents. An example item of crafting toward strengths is “In my work tasks I try to take advantage of my strengths as much as possible”, and an example item of crafting toward interests is “I organize my work in such a way that I can do what I find interesting”. Kooij et al. (2017) found that both types of job crafting predicted needs-supplies fit, but only crafting toward strengths predicted demands-abilities fit. They also found that after a training intervention of job crafting, older workers were more likely to engage in crafting toward strengths and experienced higher needs-supplies fit. These findings suggest that crafting toward strengths and crafting toward interests are meaningful crafting strategies and can influence the more proximal outcome of person-job fit in comparison with distal work and well-being outcomes.

A final case is that Demerouti and Peeters (2018) proposed two detailed types of demands crafting, optimizing demands and minimizing demands. The former refers to “the simplification or optimization of work processes to make them more efficient” and the latter refers to “minimizing the emotionally, mentally, or physically demanding aspects of one’s work” (Demerouti & Peeters, 2018, p. 211). The goal was to uncover different behaviors when reducing work demands. While items measuring minimizing demands were from Petrou et al. (2012), they created 5 items to measure optimizing demands. The scale focused on workers’ effort to improve work methods and enhance work efficiency by simplifying work processes and removing obstacles. An example item is “I look for ways to do my work more efficiently.” They found that optimizing demands was positively associated with work engagement but minimizing demands did not predict work engagement.

In summary, although job crafting as a type of proactive behavior has multiple targets (i.e., self and job), existing conceptualization of job crafting did not clearly distinguish between them and even mix the target of the self and the job in the operationalization of job crafting. In the next section, I introduce a new taxonomy of self-oriented and job-oriented crafting based on the literature of person-job fit, work design, and employability.

1.6 A New Framework of Job Crafting

Job crafters are motivated to make changes when they perceive a person-job misfit (Tims et al., 2012; Wrzesniewski & Dutton, 2001). Wrzesniewski and Dutton (2001) suggested that a worker would be motivated to craft the job when the person finds his or her needs (e.g., need for control, positive image, and connection at work) are not met in the job; by contrast, a worker would not craft if the needs are satisfied in the job. Tims et al. (2012) also noted that the main goal of job crafting is to improve person-job fit and reconstruct work motivation. Dust and Tims (2020) found in two studies that perceived misfit in task interdependence was positively associated with job crafting to decrease hindering demands. According to the control model of self-regulation (Carver & Scheier, 1998), people are motivated to reduce discrepancies between the desired and the current state in the process of maintaining and attaining goals. This mechanism is referred to as a negative feedback loop, where individuals evaluate current performance toward the goal and then make changes accordingly to reduce the discrepancy. In the case of job crafting, person-job fit represents a desired end state. When there is a mismatch between personal and job features, individuals will be motivated to devote effort to narrowing the discrepancy between the current level and the desired level of person-job fit.

It is not surprising to see a misfit between the person and the job. From a theoretical perspective, person-job misfit can occur because organizational practices of job design focus on

job positions and may not satisfy the specific preference or need of the individual job incumbent. Katz and Kahn (1978) view organization as a system of roles, where organizations allocate tasks to work roles, referring to “the summation of the requirements with which the system confronts the individual member” (p. 186). Employees are expected to perform role behaviors, defined as “recurring actions of an individual, appropriately interrelated with the repetitive activities of others so as to yield a predictable outcome” (p. 189). An organization functions well when its roles are properly performed by its employees at the job positions. To take the roles, individuals learn about role expectations and fulfill role requirements out of both extrinsic (e.g., pay and promotion) and intrinsic motives (e.g., achievement and success). A caveat is that people may have to make suboptimal choices of jobs given individual, organizational, and environmental constraints (van Vianen, 2018). It is thus possible that an employee’s personal attributes may not perfectly fit prescribed job attributes. As a result, individuals may self-select themselves out over time in a passive way (Schneider, 1987) or proactively redefine their work roles (Wrzesniewski & Dutton, 2001).

Next, I will briefly review the person-job fit literature to show why self-oriented crafting and job-oriented crafting represent two essential strategies individuals will use to rebalance the person-job relationship.

1.6.1 Person-job Fit

Person-job fit is a specific type of the general concept of person-environment (P-E) fit. P-E fit is defined as the compatibility between personal and environmental characteristics (Kristoff-Brown et al., 2005). Misfit manifests as the incongruence between personal and environmental attributes (van Vianen, 2018) and occurs when they are not matched at the same level, such as personal needs or characteristics exceeding or falling short of what the

environment provides (Edwards, 2008). Conceptually, P-E fit is maximized when there is no discrepancy between the person and the environment (Edwards et al., 2006).

The comparison of personal and environmental attributes can come from different sources. When the comparison is made between the focal person's separate evaluation of the person and the environment, it is referred to as *subjective fit* (Edwards et al., 1998; Kristoff-Brown et al., 2005); when personal and environmental attributes are assessed by sources that are independent of the focal person's perception (e.g., actual level of fit, reports from other people), it is regarded as *objective fit* (Edwards et al., 1998; Kristoff-Brown et al., 2005). van Vianen (2018) viewed both subjective and objective fit as *calculated fit*, in contrast with *perceived fit* (i.e., a holistic assessment of fit). Hence, perceived fit represents a direct approach to evaluate the general compatibility of the person and the environment (Edwards et al., 2006; Kristoff-Brown et al., 2005). Meta-analytical results (Kristoff-Brown et al., 2005) have shown that in comparison with objective fit, perceived fit and subjective fit showed stronger relationships with job attitudes (e.g., job satisfaction, organizational commitment, and intent to quit) and job performance. Though this finding could be confounded with common-method bias, perceived fit and subjective fit reflect the way people assess fit in reality, and people are believed to be mostly influenced by the fit with environment as they experience it (Kristoff-Brown et al., 2005).

Given the importance of the cognitive process of fit, it is necessary to take a close look at perceived fit and subjective fit. Edwards et al. (2006) found that perceived fit and subjective fit represent unique approaches to explain the phenomenon of P-E fit and should not be assumed to be interchangeable. As discussed, perceived fit directly assesses the level of congruence in the person and the environment from a holistic perspective. Research has shown that perceived fit appears to be the most proximal and strongest predictor of employee attitudes and behaviors

(e.g., Kristoff-Brown et al., 2005; Kristof-Brown & Billsberry, 2013). However, it is criticized for weakly demonstrating the statements of fit theory, as perceived fit does not specify how personal and environmental attributes are evaluated in the mind (van Vianen, 2018). Moreover, findings of perceived fit appeared to even contradict the conceptual logic of fit theory as research has shown a positive correlation between perceived fit and misfit (Edwards et al., 2006). In addition, using subjective measures of personal attributes and environmental attributes as separate predictors of perceived fit and job satisfaction showed that the coefficients did not significantly differ for most of the underlying attributes (Edwards et al., 2006). These findings bring concerns about the meaning of perceived fit, as it may suggest affective responses to the job (e.g., job satisfaction) than cognitive judgment of the compatibility of the person and environment elements (Edwards et al., 2006). By contrast, subjective fit reflects the process of comparing the separately rated personal and environmental attributes, which is consistent with fit theory. However, the operationalization of subjective fit using difference scores (e.g., algebraic, absolute, and quadratic difference) suffers from methodological and statistical issues, such as lack of reliability, confounding with the index's constituent components, and failure in testing theoretical assumptions (Edwards, 1994). A recommended approach is to use polynomial regression (Edwards, 1994).

From the perspective of subjective fit, person-job fit can be evaluated from whether the person and the job are supplementary or complementary. Muchinsky and Monahan (1987) suggested that *supplementary fit* exists when the person “supplements, embellishes, or possesses characteristics which are similar to other individuals” (p. 269) in the environment and regarded *complementary fit* as “weakness or need of the environment is offset by the strength of the individual, and vice versa” (p. 271). In person-job fit, employees fulfilling the organization's

expectation of work roles to meet their extrinsic and intrinsic needs (Katz & Kahn, 1978). Thus, person-job fit is conceptualized as complementary fit, in comparison with supplementary fit constructs, such as person-organization fit (Kristoff-Brown et al., 2005). Furthermore, person-job fit as complementary fit displays in the forms of needs-supplies fit and demands-abilities fit (Cable & DeRue, 2002). *Needs-supplies fit* means the congruence between employee desires (e.g., psychological needs, goals, and value preferences) and job attributes (e.g., pay, job characteristics, and roles), and *demands-abilities fit* refers to the congruence between job requirements and employee knowledge, skills, abilities, and other characteristics (Edwards, 1991, 1996). Whereas needs-supplies fit suggests the pattern of environmental supplies meeting individuals' needs, demands-abilities fit implies the opposite pattern of individual attributes meeting environmental needs (Kristoff-Brown et al., 2005). This suggests that individuals can achieve person-job fit by regulating the person (i.e., needs and capabilities) and the job (i.e., supplies and demands) side of the scale to rebalance congruence in the person-job relationship.

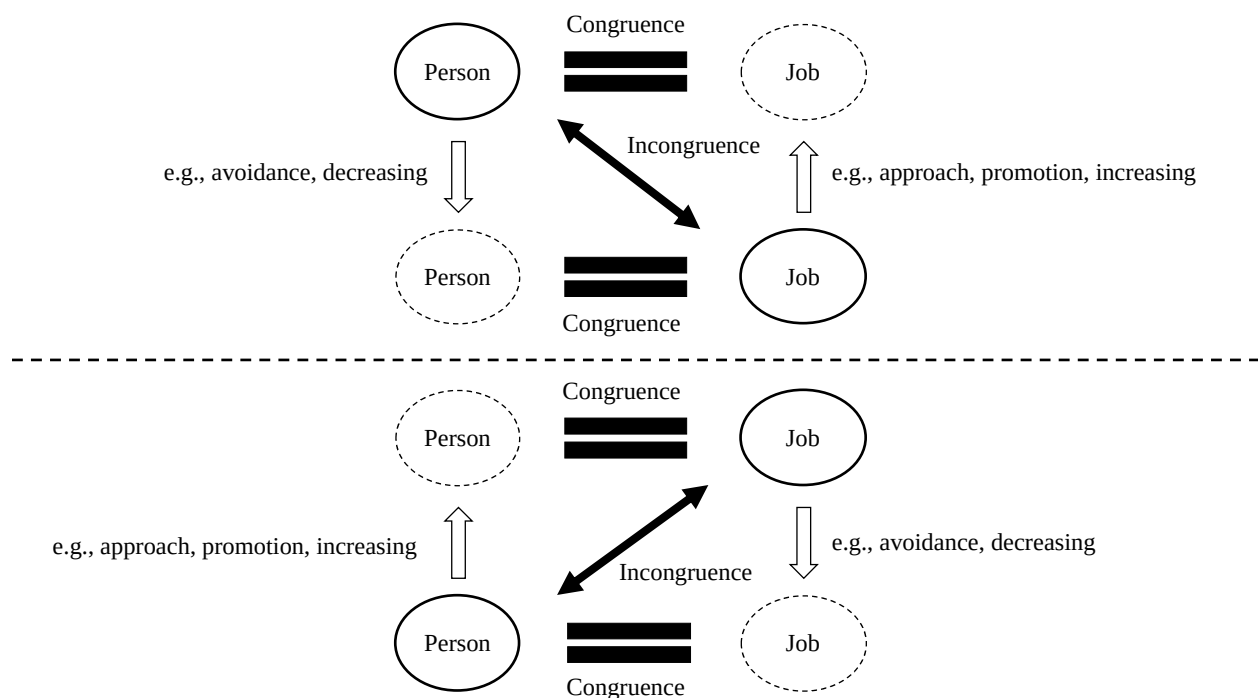
The implication here is that the comparison between the person and the job reveals how people evaluate the degree of fit. The target of impact is thus relevant to this cognitive process. When perceiving a misfit between the person and the job, individuals weigh against the two sides in terms of which one is falling short of expectation and will then be motivated to make changes to either the person or the job aspect to reduce the discrepancy. Indeed, specifying the target as the person versus the job reveals additional but vital information on the influence of fit evaluation. Edwards et al. (2006) found that the degree of influence of one's fit perception depended on which target was used as a referent in the comparison. When framing questions to ask individuals to compare the person (i.e., target) to the environment (i.e., referent), perceived personal attributes showed larger influence than perceived environmental attributes of the same

kind; conversely, when framing questions to ask individuals to compare the environment to the person, perceived environmental attributes presented larger influence than perceived personal attributes. It can thus be inferred to the context of job crafting that changes made to the self and changes made to the job can be two unique approaches to achieve person-job fit. Next, I discuss the cognitive process of decision-making in job crafting and introduce specific crafting behaviors under the category of self-oriented crafting and job-oriented crafting.

1.6.2 Crafting the Self versus Crafting the Job

Based on the cognitive process of person-job fit (Cable & DeRue, 2002; Edwards et al. 2006; van Vianen, 2018), I describe how the two methods, crafting the self and crafting the job, help job crafters rebalance the person-job relationship. Figure 2 illustrates job crafting strategies in response to different scenarios of the person-job relationship.

Figure 2. A conceptual illustration of dynamics in the person-job relationship



Note. Dashed circles represent expected person or job status; solid circles represent actual person or job status.

P-E fit theory suggests that person-job fit is maximized when personal attributes are congruent with the job's standard employee prototype; otherwise, discrepancy occurs as personal attributes either exceed or fall short of job attributes (Edwards, 2008). For instance, an employee may be overqualified for the job, or the job may ask too much of what the job incumbent can handle (e.g., work overloads, difficult tasks, and hindering work conditions). According to the control model of self-regulation, perceived discrepancy in the person-job relationship motivates people to make changes to the status quo to achieve the expected level of fit.

It is obvious that there are two targets of change. First, individuals can make changes to the *self* to fit job requirements. For example, a former senior analyst, who joins a new firm but is placed at a junior level position, tells himself to start from scratch, learn about the new environments, and grow with the new company. Another example is that an employee facing new challenges at work take opportunities (e.g., training) to learn and to improve work knowledge and skills. Second, individuals can make changes to the *job* to match job features with their own expectations. For example, an employee can reduce the time of meeting with coworkers to focus on work tasks at hand. Also, a person can seek extra and difficult tasks to meet his or her need for competency. In these cases, individuals choose to modify either the self or the job to reduce the discrepancy in personal and job features as a strategy to gain person-job fit. These strategies are not mutually exclusive, as job crafters can make changes to both the person and the job at the same time to improve person-job fit.

Therefore, I propose a new taxonomy of job crafting: self-oriented crafting and job-oriented crafting. *Self-oriented crafting* refers to employees initiating changes that directly influence personal features and functionality at work. *Job-oriented crafting* refers to employees

initiating changes that directly impact prescribed work features. The two types of job crafting reveal employee proactivity in focusing on different targets of impact.

To find out the content domain of self-oriented and job-oriented crafting, I follow Morgeson and Humphrey's (2006) work design framework to identify specific crafting behaviors that correspond to different types of work characteristics, including task, knowledge, social, and contextual characteristics. Task characteristics include autonomy, task variety, task significance, task identity, and feedback from job; knowledge characteristics include job complexity, information processing, problem-solving, skill variety, and specialization; social characteristics include social support, interdependence, interaction outside the organization, and feedback from others; contextual characteristics include ergonomics, physical demands, work condition, and equipment use. Next, I discuss how changes made to these work characteristics can be categorized into self-oriented crafting and job-oriented crafting.

1.6.2.1 Self-oriented Crafting

Drawing on the literature of employability, I propose that self-oriented crafting includes developmental crafting, relational crafting, and cognitive crafting that foster employee development. The three dimensions manage the essential components of employability, including human capital, social capital, and career identity. Employability is a person-centered psycho-social construct that represents individual adaptability of making cognitive, behavioral, and affective changes to proactively realize career opportunities (Fugate et al., 2004). Fugate et al. (2004) proposed that human capital, social capital, and career identity are critical aspects of employability. Human capital includes one's knowledge, skill, abilities, and other characteristics (e.g., personality, work experience, and emotional intelligence). Social capital refers to the goodwill of one's social networks. Career identity is described as career experience and

aspiration with which individuals interpret the question of “who am I” in the work context regarding work goals, values, and fears (Fugate et al., 2004).

Developmental crafting refers to employees improving their knowledge, skills, abilities, and other personal characteristics. Developmental crafting directly changes one’s human capital and impacts one’s individual and professional development at work. The behaviors subsumed by developmental crafting correspond to employee development, defined as expansion of one’s capacity to function effectively at work now or future (McCauley & Hezlett, 2001). Dachner et al. (2021) argued that proactivity is a critical element in employee development, as people anticipate skill needs, identify options for learning, and creates opportunities for growth and development. This is consistent with the characteristic of proactivity in job crafting. From the work design perspective (Morgeson & Humphrey, 2006), changes made via developmental crafting changes various work characteristics, such as skill variety (i.e., required variety of job skills) and specialization (i.e., the skill and knowledge set that is vital to complete job tasks). Thus, with developmental crafting, employees proactively develop their competency and capacity to function effectively at work.

Boehnlein and Baum (2020) first used the term developmental crafting to describe the crafting behavior of proactive development of individual skills and capabilities. The idea of developmental crafting can also be found in Tims et al.’s (2012) discussion of increasing structural job resources. Tims et al. (2012) viewed opportunities for development as structural job resources and the action on pursuing these resources is job crafting, such as learning new things at work and developing capabilities. However, this interpretation is misleading because job crafters are not increasing the amount of such resources but utilizing them for self-development. Thus, instead of crafting the job, individuals are actually crafting themselves.

Wrzesniewski et al.'s (2012) also mentioned that crafting only the job aspect might not be sufficient for individual improvement, and employees would need a mode of dual crafting that incorporates development of complementary skills. Similarly, Bindl et al. (2019) proposed that employees can engage in skill crafting to seek new skills and stay on top of knowledge of core areas of the job. Thus, developmental crafting captures a unique and important aspect of the proactive changes made to regulate human capital.

Relational crafting refers to employees reshaping their social networks in the workplace. This directly impacts one's social capital at work because workplace relationships provide access to information, resources, and opportunities (Nahapiet & Ghoshal, 1998). With relational crafting, individuals alter their social connections with others. Existing research usually discuss relational crafting from the perspective of job requirements. For instance, Wrzesniewski and Dutton (2001) argued that job crafters can modify their relational work boundaries by changing the quality and amount of interaction with others at work. Tims et al. (2012) viewed the relational aspects of the job from the job demands-resources perspective in that individuals can increase social job resources by looking for feedback and support from others and decrease hindering social demands by minimizing unnecessary contact with others. These views may provide an inaccurate account of one's relational experience at work because the social relationship belongs to the job incumbent rather than the job position. Workers are managing their own social capital at work in terms of the quantity and quality of social connections. Of course, a job may require the job incumbent to engage in social activities, such as communication with clients. But these activities respond to job demands, and changes made to these social connections should be categorized as demand crafting (see the discussion on this point later). Finally, relational crafting corresponds to the interdependence type of social

characteristics in Morgeson and Humphrey's (2006) framework that reflects the degree of one's connection with others and others' work.

A similar construct to relational crafting is networking behavior. Networking behavior refers to individual actions in developing, maintaining, and using relationships with other people at work to facilitate work and career related activities (Forret & Dougherty, 2004). Networking behavior was found to benefit work and career outcomes (Wolff & Moser, 2009). Relational crafting and networking are similar, as both types of behaviors manage one's social relationships with other people at work, but they are also different in a few ways. First, the purpose of networking and relational crafting can be different. Whereas networking is mostly work-related and aims to improve performance, career management, job search, or facilitate work activities (Porter & Woo, 2015), relational crafting may only serve personal preferences over the frequency and whom to contact with. Second, relational crafting focuses on developing and maintaining interpersonal relationships, but networking also includes utilizing social relationships. People doing relational crafting intend to build social capital. By contrast, people engaging in networking would also take advantage of the social relationships to serve work-related goals, such as improving work performance and looking for cooperation.

Cognitive crafting refers to employees changing how they view their work and roles. Cognitive crafting is a critical aspect of job crafting and indicates the psychological process of altering one's conception of work meaning and identity (Berg et al., 2013; Wrzesniewski & Dutton, 2001). Work meaning is what individuals make sense of the work (Pratt & Ashoford, 2003), and work identity is a work-based self-concept that influences the roles one adopts and the corresponding work behaviors (Walsh & Gordon, 2008). Regarding work meaning, people may see their work as a job, career, or calling (Wrzesniewski, 2003; Wrzesniewski et al., 1997);

in building work identity, people create customized identity through an interrelated process of learning the self in work to resolve the mismatch between who they are and what they do (Pratt et al., 2006). In addition, changes made through cognitive crafting matter to the career identity dimension of employability. Social identity theory (Tajfel & Turner, 1986) suggests that people develop their self-concept from knowledge and experiences of their membership of a social group through psychological processes, such as categorization, social comparison, and identification. People can manage their identities with different strategies, such as individual mobility (effort to escape or get involved in a group), social creativity (redefine intergroup comparison), and social competition (challenge the status quo of group). These cognitive and behavioral processes are also demonstrated in cognitive crafting behaviors, with which job crafters try to make sense of their work by redefining their work role regarding what they do and who they are in the organization (Katz & Kahn, 1978).

Morgeson and Humphrey (2006) mentioned two types of task characteristics that can be influenced by cognitive crafting: task significance and task identity. Task significance refers to how a job influences the lives or work of others, including both inside and outside members, and task identity refers to the degree of a job that involves a whole piece of work. Cognitive crafting changes one's understanding of these task features. For example, Slemp and Vella-Brodrick (2013) suggested that one can think about the significance the job has for organizational success and how the job positively impacts life. Bindl et al. (2019) stated that job crafters can consider the job as a whole rather than as separate tasks. Bruning and Campion (2018) described cognitive crafting as “metacognition” meaning “the autonomous task-related cognitive activity involving organization, sense making, and the manipulation of one's own psychological states” (p. 508).

1.6.2.2 Job-oriented Crafting

Drawing on the Input-Process-Output model (IPO; McGrath, 1964) and role theory (Kahn et al., 1964), I argue that job-oriented crafting includes demand crafting, method crafting, and performance crafting. These job-oriented crafting behaviors correspond to the process of performing one's work roles in the organization. Kahn et al. (1964) described this process as a role episode that refers to the complete cycle of organization's role sending and employees' responses to work roles. An organization, as role sender, assigns role behaviors to job positions in its role system and expects job incumbents to accomplish job requirements. In other words, an organization has specific demands of its employees to accomplish the assigned tasks. These demands serve as inputs to guide individual work activities. Individuals respond to role expectations by interpreting their roles and accomplishing job requirements. In this process, they can use different ways and methods to complete work activities. The final output will be performance outcomes. Employees are willing to achieve good performance because the outcomes are evaluated by the role sender (i.e., organization) and good performance is rewarded. They can also be intrinsically motivated to do the job (Deci & Ryan, 2000). During the role episode, employees accept and accomplish their work roles, but they can also exert proactivity to change certain aspects when they find them incongruent with their own expectations. As a result, job crafting occurs to redefine prescribed work roles.

Hence, I propose three types of job-oriented crafting that correspond to the IPO model of performing one's work roles, including demand crafting, method crafting, and performance crafting. *Demand crafting* refers to modifying work requirements (i.e., input) focusing on what to do. Job demands represent essential job characteristics that describe required physical and mental effort to accomplish job tasks (Demerouti et al., 2001). The job demands-resources model

suggests that job demands may lead to burnout and engagement. Demand crafting thus modifies these work inputs to rebalance one's work experiences. For example, individuals can look for extra tasks or challenging work tasks (Tims et al., 2012). According to Morgeson and Humphrey's (2006) work design model, there are numerous types of work features falling into the domain of demand crafting, including task variety, job complexity, information processing, interaction outside the organization, physical demands, and work conditions. Changes made via demand crafting modify these work inputs to cope with dissatisfied work contents.

Method crafting refers to adjusting the way (i.e., process) one performs work tasks. It addresses the process of responding to role expectations regarding how to complete job demands rather than to change the contents of job demands. With method crafting, individuals do not add to or remove existing work requirements but choose a preferred, favorable, or effective way to complete work tasks. For example, a person can modify work schedules (Tims et al., 2012), make the work mentally or physically less intense (Petrou et al., 2012), create new structures in work processes (Bruning & Campion, 2018), and reorganize the work in the way they find interesting (Kooij et al., 2017). Changes made through method crafting correspond to multiple work characteristics in Morgeson and Humphrey's (2006) framework, such as autonomy, problem solving, ergonomics, and equipment use. Hence, changes made to these aspects alter work approaches.

It is noteworthy that changes made by demand crafting and method crafting are informal. Individuals adjust the work contents and approaches in their own preferred ways. Similarly, i-deals can also make changes to these aspects of work. For instance, flexibility i-deals provide the capacity for individuals to schedule their work as needed, workload-reduction i-deals reach agreement on workload and work hour reduction, and task i-deals allow workers to customize

work contents (Hornung et al., 2010). However, these work arrangements are different from demand crafting and method crafting in that i-deals are formal and negotiated terms between the employee and the management to benefit both parties (Liao et al., 2016).

Performance crafting refers to making changes to facilitate work outcomes (i.e., output). To achieve the expected output of work roles, job incumbents may need help, and crafting to gain these workplace resources indicate performance crafting. For example, individuals can ask supervisors to coach them and ask colleagues for advice and feedback on their job performance (Tims et al., 2012; Petrou et al., 2012). They can also make meaningful changes to ensure the quality of deliverables (Bruning & Campion, 2018). In Morgeson and Humphrey's (2006) work design model, feedback from job, feedback from others, and social support belong to the types of resources one can seek to improve work performance via performance crafting.

Feedback-seeking is a typical way of performance crafting. Feedback-seeking refers to devoting conscious effort to get information about others' evaluations of self-behaviors (Ashford, 1986; Ashford & Cummings, 1983). Individuals can seek feedback from others in two ways: inquiry and monitoring. The former refers to explicitly asking for feedback, and the latter represents an indirect approach to observe indicators from the environment, others' behaviors, and comparison to others (Ashford, 1986; Ashford et al., 2003). Different feedback-seeking motives may determine which feedback-seeking strategies to use. People with instrumental motives seek feedback for its informational value to help them improve performance, achieve goals, and regulate behaviors (Ashford, 1986; Ashford & Tsui, 1991). Thus, they will engage in either inquiry or monitoring (Ashford et al., 2003). By contrast, people driven by ego and image defense/enhancement motives would be less likely to directly seek feedback through inquiry, because negative feedback may hurt their pride and self-esteem, and the feedback seeking

behavior may make them look bad (Ashford & Cummings, 1983; Ashford et al., 2003). Both inquiry and monitoring can be used as performance crafting.

In conclusion, there are two types of job crafting: self-oriented crafting and job-oriented crafting. Self-oriented crafting includes the behaviors of developmental crafting, relational crafting, and cognitive crafting; job-oriented includes the behaviors of demand crafting, method crafting, and performance crafting. This dissertation research will provide an initial empirical test of this framework.

In the next chapter, I develop hypotheses about self-oriented crafting and job-oriented crafting and make the argument that the two are empirically distinct from each other. I first propose that self-oriented crafting and job-oriented crafting represent unique conceptual domains of job crafting behavior. Then I argue that they relate to different types of supervisor support (i.e., emotional support versus instrumental support), and the relationships are moderated by unique boundary conditions. Specifically, I suggest that employee affective commitment to the organization moderates the relationship between supervisor emotional support and self-oriented crafting, whereas one's task-contingent conscientiousness moderates the relationship between supervisor instrumental support and job-oriented crafting. Finally, I examine whether the two types of job crafting would make differential predictions of person-organization fit and task performance.

CHAPTER 2 HYPOTHESIS DEVELOPMENT

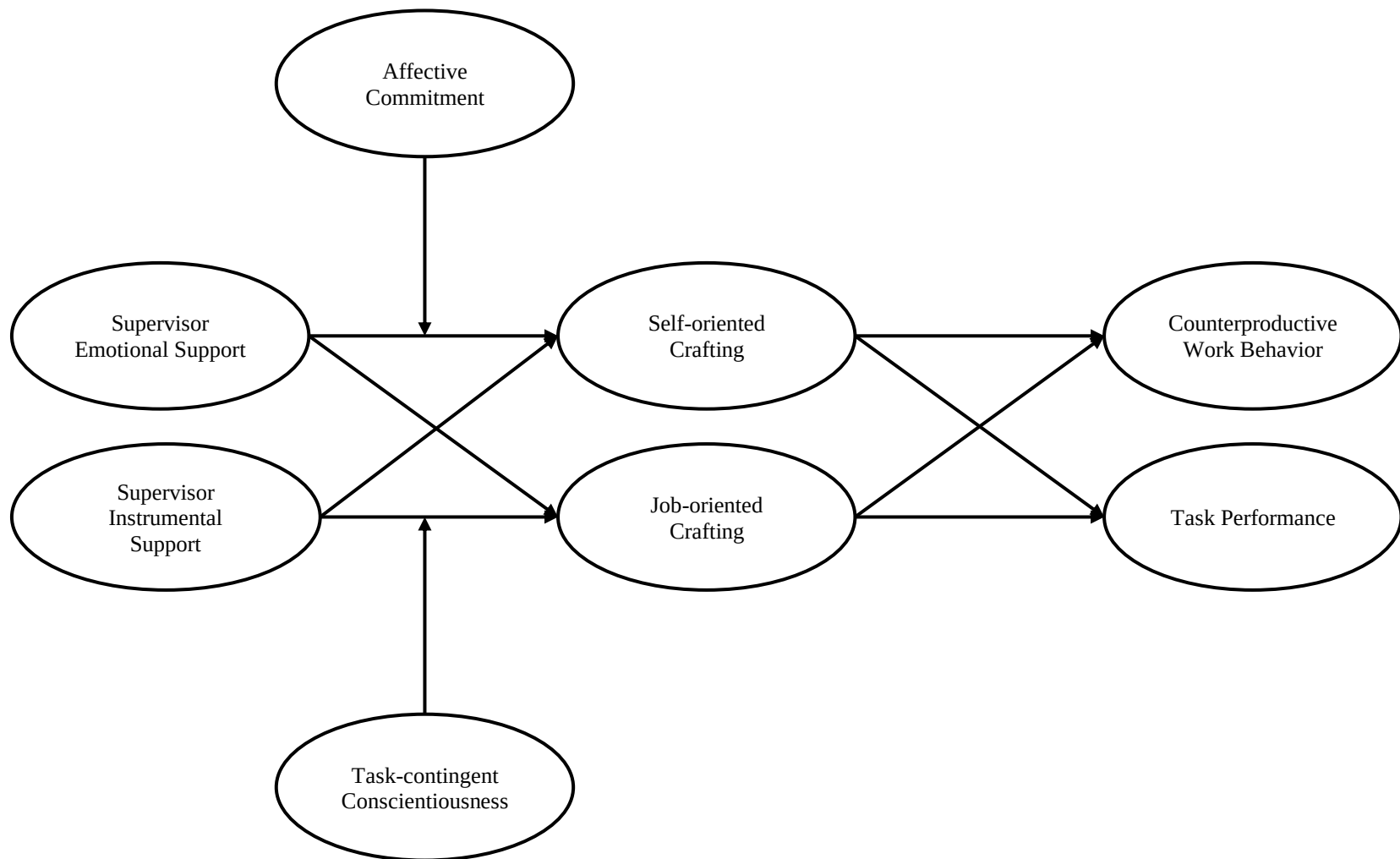
2.1 Two Unique Types of Job Crafting

Drawing on the literature of job crafting, person-job fit, and work design, I explicated the conceptual domains of self-oriented crafting and job-oriented crafting. It is noticeable that the two represent distinct types of job crafting behaviors. Self-oriented crafting and job-oriented crafting have different targets, serve different crafting goals, and address different aspects of one's experiences at work. Whereas self-oriented crafting is concerned with improving one's employability at work, job-oriented crafting addresses how jobs are performed. They are thus conceptually different from each other and are not interchangeable. Self-oriented crafting cultivates one's skills and abilities, develops relationship with others, and/or explores self-identity and the meaning of work, but it does not directly deal with job-specific tasks or issues. By contrast, job-oriented crafting focuses on immediate work tasks at hand regarding what to do and how to do, but it does not directly build human and social capital or alter how one views the job. Job crafters may can craft in either a self-oriented or job-oriented approach, or they can engage in both types of job crafting as well. Therefore, self-oriented crafting and job-oriented represent unique content domains of job crafting.

Hypothesis 1: Self-oriented crafting and job-oriented crafting are empirically distinct from each other.

In light of this, I suggest that self-oriented crafting and job-oriented will have specific relationships with specific constructs. Figure 3 presents the conceptual model that summarizes those relationships of interest in this research. I will explain the hypothesized relationships in the following sections.

Figure 3. Conceptual model



2.2 Supervisor Support and Job Crafting

Job crafting happens in the workplace, and the social characteristics of the job (e.g., social support, feedback from others), are motivational job features (Morgeson & Campion, 2003; Parker et al., 2001) that can influence one's crafting behavior. Among the members of an organization, supervisor is an important social partner whose support is important to the employee. This is because supervisors are usually experienced and have hierarchical power in the organization (Anderson & Brown, 2010; Magee & Galinsky, 2008). The interaction with supervisor represents a common but important part of one's work. Support from supervisors, such as encouragement, feedback, and assistance, can guide work activities and help individuals deal with work challenges and restructure work environments (Griffin et al., 2001).

In comparison with the social support from other sources (e.g., coworker, family, and friends), supervisor support was found to have the strongest effect of reducing job strain (Fenlason & Beehr, 1994). More importantly, supervisor support influences employee proactive behaviors. For example, employees are more likely to seek schedule flexibility i-deals when they receive emotional support from supervisors (Kelly et al., 2020), and supervisor support was found to predict personal initiative (Ohly et al., 2006). Supervisor support is also important to job crafting behaviors, because the opportunities to craft may depend on supervisors (Wrzesniewski & Dutton, 2001). Huyghebaert-Zouaghi et al. (2021) found that supervisor support was positively related to seeking resources; Sheehan et al. (2021) found that supervisor support was positively related to overall job crafting and that when supervisor support was high versus low, employees became more likely to utilize resources from high performance work practices to craft their jobs.

I contend that supervisor support influences job crafting for two reasons. First, from the perspective of work design, supervisor support is a job resource (Demerouti et al., 2001). Supervisors can navigate employees through work challenges, provide feedback on their performance, and give advice about problem-solving. The social support from supervisors can also alleviate job-related stress (Fenlason & Beehr, 1994). Supervisor, by expressing care and concerns for employees in difficulties, helps reduce employees' stress from work demands (Bakker & Demerouti, 2007). Moreover, supervisor support motivates employees to get engaged in work activities (Christian et al., 2011), as social support satisfies the basic needs for autonomy, competence, and relatedness (Humphrey et al., 2007; Williams et al. 2014). As a result, people are intrinsically motivated to devote effort towards goals and invest themselves in the job rather than being driven by extrinsic motives (e.g., rewards and punishments) (Deci & Ryan, 1985; Ryan & Deci, 2000). Research has shown that employees receiving higher social support are more engaged in their work (Christian et al., 2011), experience less exhaustion and depersonalization (Halbesleben, 2006; Viswesvaran et al., 1999), and demonstrate stronger performance (van der Laken et al., 2019). Thus, social support, as a critical type of job resources, can not only cope with work demands and stress (Demerouti et al., 2001; Karasek et al., 1982) but also encourage employees to be proactive at work (Crant, 2000).

Second, from the perspective of social exchange (Blau, 1964; Gouldner, 1960), supervisor support suggests a rewarding interpersonal relationship and a supportive organizational environment, and employees perceiving such support would feel necessary to give back in future interactions. The organizational support theory (Eisenberger et al., 1986) also suggests that individuals receiving workplace support will develop felt obligation toward the source of support, commitment to their roles in the organization, and beliefs in performance-

reward expectancy. As supervisors act as organizational agents, their favorable and supportive actions towards employees will be credited to the organization (Eisenberger et al., 2002; Rhoades & Eisenberger, 2002). This was supported by meta-analytical evidence (Rhoades & Eisenberger, 2002): perceived supervisor support and organizational support was moderately to strongly correlated ($\rho = .40$). Accordingly, supervisor support signals that the supervisor and the organization value employees' work and care about employee well-being (Kottke & Sharafinski, 1988). Hence, individuals would want to reciprocate with effort to build an effective and meaningful job. In sum, both the work design and social exchange perspective suggest that supervisor support can promote job crafting at work.

Social support from supervisor has two general types: emotional support and instrumental support (Fenlason & Beehr, 1994). Fenlason and Beehr (1994) described emotional support as actions of caring about the well-being of the person and showing empathy to the challenges and problems one may have. Instrumental support refers to providing tangible assistance and resources to complete a task. Though emotional support and instrumental support were found to be strongly correlated, they are still associated with different types of outcome variables both conceptually and empirically (Mathieu et al., 2019). The meta-analytical study by Mathieu et al. (2019) found that emotional support relative to instrumental support had a stronger relationship with work-family conflict, depersonalization, and negative physical symptoms, whereas instrumental support had a stronger relationship with role conflict, role overload, and task performance. In another meta-analytical study, Chiaburu and Harrison (2008) found that coworker instrumental support versus emotional support was more strongly related to task performance. From these findings, it is noticeable that whereas emotional support appeared to have a closer association with person-related variables, instrumental support had a closer link

with job-related variables. This is consistent with Fenlason and Beehr's (1994) findings that emotional support had a stronger relation with strain than with stressors and that instrumental support had a stronger relation with stressors than with strain. This is likely because emotional support and strain variables share the common emotional context and instrumental support and stressors share the common task context (Mathieu et al., 2019).

Therefore, I propose that supervisor emotional support will be more strongly related to self-oriented crafting than to job-oriented crafting, and supervisor instrumental support will be more strongly related to job-oriented crafting than to self-oriented crafting. With supervisor emotional support, people are emotionally charged, feel empowered and valued, and are motivated to contribute to and grow together with the organization. As a result, they may focus more on developing themselves and cultivate interpersonal relationships at work to gain more of such resources. In addition, people receiving emotional support from supervisor would also appreciate the supportive work environment, think of the good aspects of the job, and discover meaning in the job. With supervisor instrumental support, people receive concrete resources, such as direct assistance, advice, and feedback, that guide one's work activities. People thus have task-specific resources that can be immediately applied to the job. Following the guidance and information from supervisors, individuals can modify their work methods and add contents to existing work to make work more effective and productive. In addition, these resources also suggest that the supervisor is a valuable source of help, and individuals will likely continue to turn to supervisors for help in future occasions. Hence, the job-centered, supervisor instrumental support would be more influential to one's job-oriented crafting than to self-oriented crafting. By contrast, supervisor emotional support is general, and the affective resource would be more

influential in shaping one's feelings towards the job. Job incumbents would thus be willing to develop themselves in the organization through self-oriented crafting. Thus, I hypothesize that:

Hypothesis 2: Supervisor emotional support has a stronger relationship with self-oriented crafting than with job-oriented crafting.

Hypothesis 3: Supervisor instrumental support has a stronger relationship with job-oriented crafting than with self-oriented crafting.

It is worth noting that proactive personality is a critical individual characteristic that leads to proactive behavior (Bateman & Crant, 1993; Fuller Jr. & Marler, 2009; Tornau & Frese, 2013). Proactive personality describes a relatively stable behavioral tendency of initiating and maintaining actions that are unconstrained by situational forces and directly impact the surrounding environment through changes (Bateman & Crant, 1993). People with proactive personality actively search opportunities to change, take actions, and persevere until changes are made; by contrast, people lacking proactive personality would fail to identify opportunities and even dodge opportunities to make changes (Bateman & Crant, 1993). Meta-analytical results (Rudolph et al., 2017) have provided support to this link: proactive personality and job crafting have a strong correlation ($\rho = .51$).

However, I do not expect proactive personality to relate to self-oriented crafting and job-oriented crafting in different ways. Though the two types of job crafting differ in the target of impact, they all represent individual proactivity in making changes, yet towards different targets. As I discussed earlier, proactive individuals can choose to craft in either way or both when needed. Given that the relationship between proactive personality and job crafting has been established from prior studies, I will not propose a formal hypothesis regarding its influence on job crafting but include it as a control variable in empirical analyses.

2.3 The Joint Effect of Supervisor Support and Affective Commitment and Task-Contingent Conscientiousness on Job Crafting

Though supervisor support is a valuable resource for job crafters, one needs to be willing and able to utilize it. Upon receiving supervisor support, people have access to emotional (e.g., caring, understanding, and empathy) and instrumental (e.g., information, guidance, and assistance) resources. But people may differ in how and to what extent they transfer those resources to work. From a “will-do” perspective, people who acknowledge the value of and like the source of support will be more likely to use it; from a “can-do” perspective, people need to have the capability of responding to available resources and putting extra effort to applying it to work. These affective and cognitive responses will thus work together with supervisor support to influence job crafting.

One possible factor is individual affective commitment to the organization. Affective commitment indicates an emotional attachment or bond to the organization. Employees with affective commitment to the organization have a sense of belongingness and identification, get involved in organizational activities, and desire to remain in the organization (Meyer & Allen, 1991). Because of this, individuals with high affective commitment will be more willing to use supervisor emotional support to facilitate self-oriented crafting.

First, the goal of self-oriented crafting to develop together with the organization shares the conceptual basis with affective commitment. Meyer and Allen (1991) suggested that “Employees with a strong affective commitment continue employment with the organization because they *want* to do so” (p. 67). Accordingly, crafting one’s human capital, social capital, and identity with the job is a viable approach to maintain one’s membership in the organization and improve the experience in the organization.

Second, affective commitment can determine the extent to which a person utilizes supervisor emotional support for the purpose of self-oriented crafting. As discussed in the prior section, the relationship between supervisor emotional support and self-oriented crafting can be explained from a resource and social exchange perspective. As supervisor emotional support provides resources, it is possible that people with high affective commitment would be more willing to use the resource because they value the support from supervisor who represents the organization (Eisenberger et al., 2002; Rhoades & Eisenberger, 2002). On the contrary, people with low affective commitment may not recognize with the source of help and thus withhold attention and effort, which might be otherwise used at work.

In addition, individuals may differ in the degree to which they engage in reciprocity (Cropanzano & Mitchell, 2005). For example, people with a strong exchange ideology are more likely to reciprocate (e.g., Eisenberger et al., 1986; Orpen, 1994; Witt, 1991). In a similar vein, people with strong affective commitment may be more willing to return supervisor emotional support by improving their employability. Research has shown that employees would exchange their commitment for employers' support (Eisenberger et al., 1986; Eisenberger et al., 1990). High affective commitment motivates one to reciprocate the emotional support from supervisor with self-oriented crafting to develop. By contrast, people with low affective commitment may not agree with the goals, values, and cultures of the organization and thus withhold effort in organizational activities. This undermines the rule of interdependence for social exchange relationships (Cropanzano & Mitchell, 2005). As a result, the basis for the belief in social exchange no longer exists, and people would not respond to supervisor emotional support.

Therefore, I hypothesize that:

Hypothesis 4: Affective commitment moderates the relationship between supervisor emotional support and self-oriented crafting, such that the relationship is stronger when affective commitment is higher.

Another factor that influences the relationship between supervisor support and job crafting, particularly between supervisor instrumental support and job-oriented crafting, is the personality trait of task-contingent conscientiousness. It refers to the behavioral tendency of adjusting one's state conscientiousness in response to situational cues (Huang & Ryan, 2011; Minbashian et al., 2010). People with high task-contingent conscientiousness evaluate how demanding the task is and regulate their cognitive resources and behaviors contingent on the situation. For instance, upon approaching deadlines or facing a challenging task, a person high in task-contingent conscientiousness will be more focused on the task, devote more effort, and become meticulous at the task (Huang & Ryan, 2011). Such an ability in regulating state conscientiousness (i.e., the level of conscientiousness at a specific moment instead of in general; Fleeson, 2001) will help individuals apply supervisor instrumental support to job-oriented crafting.

With supervisor instrumental support, people have job-related and task-specific guidance, assistance, and advice. Such help, regarding what to do and how to accomplish work roles, is quite relevant to job-oriented crafting, which reshapes the input, process, and output of performing one's job. However, integrating this new information into practices adds to one's work capacities. Transfer of supervisor instrumental support can be a challenging task. In a similar situation where employees apply trained knowledge and skills to work, transfer of training is demanding and challenging (Baldwin & Ford, 1988; Blume et al., 2019). Accordingly, job crafters, as they make changes to the demand, method, and performance outcome of the job,

need extend extra effort to take advantage of supervisor instrumental support. Hence, people with high task-contingent conscientiousness will be better able to concentrate on the task of applying available resources to job crafting, because they are more responsive to the situational cues of supervisor instrumental support. By contrast, people with low task-contingent conscientiousness would be unable to put additional effort to translate supervisor instrumental support into job-oriented crafting. Therefore, I hypothesize that:

Hypothesis 5: Task-contingent conscientiousness moderates the relationship between supervisor instrumental support and job-oriented crafting, such that the relationship is stronger when task-contingent conscientiousness is higher.

2.4 The Differential Outcomes of Self-oriented Crafting and Job-oriented Crafting

I consider task performance and counterproductive work behavior (CWB) as two possible performance outcomes (Rotundo & Sackett, 2002) of job crafting in this study. Task performance refers to work activities that are formally recognized as part of the job and contribute to the technical cores of the organization (Motowidlo & Van Scotter, 1994). Task performance thus summarizes the expectations of how one *does* a job. In comparison with task performance, counterproductive work behavior reflects how one *feels* about the job. CWB represents intentional workplace deviance that is harmful to the interest of an organization and/or its members (Robinson & Bennett, 1995). Workers conducting CWB towards the organization may take unnecessary breaks, do not work fully of their abilities, or speak poorly about the organization to others (Dalal et al., 2009). These deviant workplace behaviors were found to be affect-driven (Colquitt et al., 2013; Dalal et al., 2009), which suggests that one's affective experiences at work can instigate or inhibit CWB. It is worth noting that task performance and CWB are different from organizational citizenship behavior (OCB) (Dalal, 2005). Research has

shown that in comparison with OCB that is extra-role, task performance and counterproductive work behavior are more influential in evaluating one's job performance (e.g., Rotundo & Sackett, 2002). Therefore, I focus on task performance and CWB as performance outcomes of job crafting and examine from an affective versus instrumental perspective how they are associated with job-oriented crafting and self-oriented crafting.

The meta-analytical study by Rudolph et al. (2017) provided some initial evidence that self-oriented crafting may have a stronger link with affect-based outcomes while job-oriented crafting may have a closer link with instrumental outcomes. Rudolph et al. (2017) found that the correlation with job satisfaction was stronger for increasing structural resources ($\rho = .40$, 95 % CI = [.37, .43]) than increasing challenging demands ($\rho = .31$, 95 % CI = [.28, .34]) and increasing social job resources ($\rho = .25$, 95 % CI = [.22, .28]). Similarly, the correlation with turnover intention was stronger for increasing structural resources ($\rho = -.16$, 95 % CI = [-.20, -.11]) than increasing challenging demands ($\rho = -.09$, 95 % CI = [-.14, -.04]) and increasing social job resources ($\rho = -.02$, 95 % CI = [-.07, .03]). By contrast, the correlation with other-rated performance was stronger for increasing challenging demands ($\rho = .42$, 95 % CI = [.33, .51]) than increasing structural job resources ($\rho = .28$, 95 % CI = [.17, .38]) and increasing social job resources ($\rho = .21$, 95 % CI = [.13, .29]). In addition, the relative weights analysis showed that compared with other types of job crafting, increasing structural job resources explained the largest portion of variance in job satisfaction (54.7%), whereas increasing challenging demands explained the largest portion of variance in other-rated performance (67.8%).

Rudolph et al. (2017) did not explicate these observations, but the framework of self-oriented crafting and job-oriented crafting can provide some insights. Tims et al. (2012) described increasing structural resources as actions to learn new things and develop one's

capability and professional competency. It thus reflects the idea of self-oriented crafting in terms of developmental crafting. Similarly, increasing challenging demands (e.g., seeking new tasks) and increasing social job resources (e.g., asking for feedback and advice) correspond to demand crafting and performance crafting, both of which are job oriented. As discussed above, self-oriented crafting and job-oriented crafting have different targets of impact. Self-oriented crafting targets at the job incumbent, and changes are made to improve employee employability and development. Targeting at the job, job-oriented crafting alters job contents regarding what tasks people do and how they accomplish those tasks. According to the findings by Rudolph et al. (2017), it is possible that self-oriented crafting (e.g., increasing structural job resources), compared with job-oriented crafting (e.g., increasing challenging job demands and social job resources), would have a stronger relationship with affect-based outcomes (e.g., CWB), and job-oriented crafting, compared with self-oriented crafting, would have a stronger relationship with instrumental outcomes (e.g., task performance).

From cognitive and affective perspectives, self-oriented crafting can reshape one's evaluation of the person-organization relationship and develop favorable attitudes and feelings towards the organization. According to psychological ownership theory (Pierce et al., 2001), individuals develop a sense of ownership of an object when they feel controlling the target, intimately knowing about the target, and investing their self into the target. Such a state of mind indicates the feeling of being possessive of and psychologically tied to the target (Pierce et al., 2001). With self-oriented crafting, individuals can develop their human capital and social capital, and in the process of seeking these resources in the organization, they get to know the organization better. Also, accumulation of these resources enhances one's feeling of control of the professional development in the organization. More importantly, cognitive crafting allows a

person to invest their self into the job and then gain new understanding of the meaning and identity in the organization. As a result, self-oriented crafting makes the job incumbent feel psychologically owning the job (Wrezniowski & Dutton, 2001) and thus develop favorable attitudes towards the organization. This is supported by empirical (e.g., Bernhard & O'Driscoll, 2011; Peng & Pierce, 2015; Van Dyne & Pierce, 2004) and meta-analytical evidence (e.g., Zhang et al., 2021): psychological ownership is positively related to job satisfaction and negatively related to turnover intention.

In addition, self-oriented crafting improves the person-organization relationship, and job crafters can be emotionally charged to feel good about working in the organization. Lazarus (1991) argued that one's affective feelings can be influenced by how an event or object is appraised. Self-oriented crafting can be viewed as a favorable workplace event that matters to the individual self because changes are made to enhance employability in the organization. According to affective events theory (Weiss & Cropanzano, 1996), work events are first cognitively appraised, and then general affective feelings are activated. The resulting emotional well-being can further drive individual behaviors at work. Colquitt et al. (2013) found in their meta-analytical study that procedural and distributive justice perceptions at work had negative indirect effect on CWB via state affect, but the direct effect was not significant. Therefore, individuals who conduct self-oriented crafting will develop favorable attitudes and feelings towards the organization and will be less likely to do things that harm the interest of the organization they feel owning and liking.

It is noteworthy that research has shown that the influence of psychological ownership on performance outcomes was weak (Dawkins et al., 2017). For example, Van Dyne and Pierce (2004) found that organization-based psychological ownership had a marginal influence on job

performance, and Mayhew et al. (2007) did not find a significant relationship between job-based psychological ownership and job performance. This is consistent with Chen et al.'s (2022) finding that psychological ownership functions as a double-edged sword on job performance through different territorial behaviors, where territorial expanding is beneficial but territorial defending is detrimental. Besides, changes made via self-oriented crafting focus on employee development instead of immediate tasks at hand, and the effectiveness of self-development may take a longer time (e.g., several months or a couple of years) to effect on performance outcomes. Therefore, though self-oriented crafting may have a closer link with CWB, the relationship with task performance could be weak.

By contrast, job-oriented crafting would have a closer link with task performance than with CWB. Job-oriented crafting corresponds to the instrumental and practical aspect of the job. Changes are made to directly shape external work requirements of how one does the job. With demand crafting, individuals match work demands with their work capacity, needs, and strengths; with method crafting, people choose favorable or preferred ways to accomplish work tasks; with performance crafting, one seeks resources from the work environment to help achieve work goals. These crafting behaviors reshape the input, process, and output of one's work, thus directly influencing performance outcomes. Job-oriented crafting, as it regulates job demands and job resources, may change one's engagement at work. According to job demands-resources model (Demerouti et al., 2001), job demands and job resources influence work engagement, which refers to a psychological state characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Harju et al. (2021) found that job crafting was related to changes in job complexity and workloads and then had subsequent influence on changes in work engagement. Bakker et al. (2012) found that the indirect effect of job crafting on in-role performance was

mediated via work engagement. Tims et al. (2015) found that work engagement positively mediated the effect of crafting job resources and challenging demands on in-role performance and negatively mediated the effect of crafting hindering demands on in-role performance. Rofcanin et al. (2019) found that at the weekly level, relational crafting was related to work performance via work engagement. Those findings suggest that job-oriented crafting would be associated with performance outcomes.

Therefore, I hypothesize that:

Hypothesis 6: Self-oriented crafting, compared with job-oriented crafting, will be more strongly related to CWB.

Hypothesis 7: Job-oriented crafting, compared with self-oriented crafting, will be more strongly related to task performance.

2.5 Job Crafting Translates Supervisor Support into CWB and Task Performance

Based on prior discussions on the relationships between job crafting and supervisor support and performance outcomes, it is likely that there is an indirect association between supervisor support and performance outcomes via job crafting. From a work design perspective, social support in the workplace is an important work characteristic. The meta-analytical study by Humphrey et al. (2007) found that social support had a small correlation with absenteeism ($\rho = -.09$, 95% CI = $[-.14, -.03]$) and subjective performance ($\rho = .12$, $[-.01, .25]$). Job crafting could serve as a channel to translate the available resources from supervisor into favorable performance outcomes. On the one hand, employees often view supervisors as representatives of the organization (Eisenberger et al. 2002), and when receiving social support from them, perceived goal congruence will be enhanced (Vancouver & Schmitt, 1991). On the other hand, job crafting cultivates work meaning (Wrzesniewski & Dutton, 2001), develops responsibility

towards the job (Avery et al., 2009; Pierce et al., 2001), and help improve fit (Tims et al., 2012). These functions are important to transfer of work characteristics into work outcomes (Humphrey et al., 2007). As a result, employees would be less likely to do things that harm the interest of the organization given the improved attitudes towards the organization. To mention it, Humphrey et al. (2007) found that social support had a moderate to high correlation with overall job satisfaction ($\rho = .56$).

In addition, from a social exchange perspective, one may be more willing to endorse organizational values and goals and demonstrate good work performance to reciprocate the support from supervisor. For instance, by giving emotional support, supervisors attend to employees' emotional well-being such that the employees would feel being valued and understood by the agent of the organization. Hence, it becomes easier for the employees, at least affectively, to accept and agree with organizational values, goals, and cultures. Also, the support from supervisor motivates employees to be agentic and adaptive when there are difficulties and challenges. As a result, they will actively try to maintain performance level and do more to address new challenges. As self-oriented crafting fosters employee development and job-oriented crafting equips the job incumbent with improved capacity to fulfill work roles, they enable people to better reciprocate supervisor support.

As noted, social support from supervisor demonstrates in emotional and instrumental forms, and they would have differential relationships with self-oriented crafting and job-oriented crafting. I expect the indirect effect of supervisor emotional support and instrumental support to be more salient on CWB and task performance when supervisor emotional support and instrumental support are separately transmitted via self-oriented crafting and job-oriented crafting. That is, self-oriented crafting will mediate the influence of supervisor emotional support

on CWB, and job-oriented crafting will mediate the influence of supervisor instrumental support on task performance. However, there could be other attitudinal or behavioral mechanisms, such as work engagement (e.g., Christian et al., 2011), leader-member exchange (e.g., Wayne et al., 1997), and organizational identification (e.g., Wang et al., 2017), that also explain how individuals turn supervisor support into work outcomes. In addition, the paths via self-oriented crafting and job-oriented crafting together explained different portions of variances in outcome variables. I therefore argue that job crafting will partially mediate the influence of supervisor support on CWB and task performance. Thus, I hypothesize that:

Hypothesis 8: Self-oriented crafting partially mediates the influence of supervisor emotional support on CWB.

Hypothesis 9: Job-oriented crafting partially mediates the influence of supervisor instrumental support on task performance.

In addition, considering the moderating role of affective commitment and task-contingent conscientiousness, I also expect these factors to moderate the indirect effect of supervisor support on the outcomes via job crafting. Upon receiving supervisor emotional support, people with affective commitment will be more willing to do self-oriented crafting that builds a closer connection between the job crafter and the organization. As a result, individuals are more willing to contribute to the organization instead of sabotaging. With supervisor instrumental support, people high in task-contingent conscientiousness will have a larger capacity to engage in job-oriented crafting and benefit from the proactive changes, thus showing better task performance. Therefore, I hypothesize that:

Hypothesis 10: Affective commitment moderates the indirect relationship between supervisor emotional support and CWB via self-oriented crafting, such that the indirect effect is stronger for people with higher affective commitment.

Hypothesis 11: Task-contingent conscientiousness moderates the indirect relationship between supervisor instrumental support and task performance via job-oriented crafting, such that the indirect effect is stronger for people with higher task-contingent conscientiousness.

CHAPTER 3 METHOD AND RESULTS

I conducted three studies in this dissertation research. Following the recommended steps to develop new measurement instrument (Hinkin, 1998), I first examined in two studies the validity of a new measurement scale of self-oriented crafting and job-oriented crafting. In Study 1, I collected online questionnaire responses from 676 Amazon Mechanic Turk (MTurk) workers. MTurk is a crowdsourcing online platform that connects task requesters with task workers. Exploratory factor analysis was performed with one random half of this sample, and confirmatory factor analysis was performed with the other random half. In Study 2, I collected another sample of 209 MTurk workers, which was independent from the sample in Study 1. The purpose of Study 2 was to replicate the findings in Study 1 and test the discriminant validity of self-oriented crafting and job-oriented crafting. Based on these initial findings, I conducted Study 3 to test other research hypotheses using a time-lagged design with two waves of online questionnaires. Data in Study 3 were collected from 420 full-time Chinese adult workers from several organizations.

I used SPSS Statistics (Version 28) and *Mplus* (Version 8.6) to analyze the empirical data. Missing data were analyzed using full information maximum likelihood (FIML) with robust maximum likelihood estimator. Indirect effect was tested using 5000 bootstrapped samples. Model fit was determined by using the recommended criteria of $CFI \geq 0.90$ and $RMSEA \leq 0.08$ as evidence of adequate model fit (Marsh et al., 2005). Model comparison used chi-square difference test with scaling correction for robust maximum likelihood (see Satorra and Bentler, 2010).

3.1 Study 1 Method

3.1.1 Item Generation

Items of self-oriented crafting and job-oriented crafting were developed using a deductive approach. Following the theoretical definitions and conceptual domains of self-oriented crafting and job-oriented crafting introduced in Chapter 2 of this dissertation, I generated new items and also used items from existing scales. The original pool of measurement items included 147 items (e.g., “I try to develop my capabilities”) from existing studies and 18 self-developed items (e.g., “I try to expand my social networks at work”). Three independent coders then categorized these items into either self-oriented crafting or job-oriented crafting based on face validity to determine if the items demonstrated the conceptual definitions of different types of job crafting. For self-oriented crafting, qualified items describe behaviors of developmental crafting, relational crafting, and cognitive crafting; for job-oriented crafting, qualified items represent demand crafting, method crafting, and performance crafting. Initially, the three coders had 87 (52.7%) of the total of 165 items categorized under the same corresponding labels. After reviewing the results, coders agreed on another 20 items and found the rest of the 58 items conceptually ambiguous under the framework of self-oriented crafting and job-oriented crafting, thus removing them from the pool. Furthermore, another 37 items that either have similar verbiage or indicate avoidance crafting were excluded, resulting in a total of 70 items that coders have full agreement on the categorization. Considering practicality while at the same time ensuring that there are sufficient numbers of items for each construct (Hinkin, 1998), I finally retained 36 items that best represent the self-oriented crafting and job-oriented crafting construct. Table 3 lists these items used in Study 1.

Table 3. Original job crafting items used in Study 1

Job crafting items	Sources	Types of job crafting
Self-oriented crafting		
<i>Developmental crafting</i>		
I try to develop my capabilities.	Tims et al. (2012)	Increasing structural job resources
I try to develop myself professionally.	Tims et al. (2012)	Increasing structural job resources
I actively explore new skills to do my overall job.	Bindl et al. (2019)	Promotion-oriented skill crafting
I make sure I stay on top of knowledge in core areas of my job.	Bindl et al. (2019)	Promotion-oriented skill crafting
I seek resources for career development.	Self-developed	Developmental crafting
I take opportunities to develop my professional skills at work.	Self-developed	Developmental crafting
<i>Relational crafting</i>		
I actively initiate positive interactions with others at work.	Bruning & Campion (2018)	Social expansion
I actively work to improve the quality of my social relationships at work.	Bruning & Campion (2018)	Social expansion
I make efforts to get to know other people at work better.	Bindl et al. (2019)	Promotion-oriented relationship crafting
I engage in networking activities to establish more relationships.	Slemp & Vella-Brodrick (2013)	Relational crafting
I put effort to manage my relationships with others at work.	Self-developed	Relational crafting
I try to expand my social networks.	Self-developed	Relational crafting
<i>Cognitive crafting</i>		
I use my thoughts to put myself into a good mood at work.	Bruning & Campion (2018)	Metacognition
I find personal meaning in my tasks and responsibilities at work.	Niessen et al. (2016)	Cognitive crafting
I think about the ways in which my work positively impacts my life.	Slemp & Vella-Brodrick (2013)	Cognitive crafting
I think about the good aspects of my work.	Self-developed	Cognitive crafting
I consider how my work contributes to organizational goals.	Self-developed	Cognitive crafting
I take on different perspectives to think about my job.	Self-developed	Cognitive crafting

Table 3. (cont'd)

Job crafting items	Sources	Types of job crafting
Job-oriented crafting		
<i>Demand crafting</i>		
I ask for more responsibilities.	Petrou et al. 2012	Seeking challenges
I change my tasks so that they are more challenging.	Bindl et al. (2019)	Promotion-oriented task crafting
I actively look for tasks that match my own interests.	Kooij et al. (2017)	Crafting towards interests
I give preference to work tasks that suit my skills or interests.	Slemp & Vella-Brodrick (2013)	Task crafting
I seek out opportunities to make greater contributions at work.	Self-developed	Demand crafting
I try to keep a balance between the amount of work and my energy.	Self-developed	Demand crafting
<i>Method crafting</i>		
I prioritize my work in an organized manner.	Bruning & Campion (2018)	Work organization
I use new knowledge or technology to structure my work.	Bruning & Campion (2018)	Adoption
I improve work procedures to be more efficient.	Slemp & Vella-Brodrick (2013)	Task crafting
I change minor procedures that I think are not productive.	Slemp & Vella-Brodrick (2013)	Task crafting
I make innovations in the work process.	Self-developed	Method crafting
I make a customized schedule to organize my work.	Self-developed	Method crafting
<i>Performance crafting</i>		
I ask others for feedback on my job performance.	Tims et al. (2012)	Increasing social job resources
I contact other people from work to get the necessary information for completing my tasks.	Petrou et al. (2012)	Seeking resources
When I have difficulties or problems at my work, I discuss them with people from my work environment.	Petrou et al. (2012)	Seeking resources
I try to gain resources from work to help me do my job.	Bruning & Campion (2018)	Work role expansion
I make an effort to secure necessary resources to enable me to fulfill my job responsibilities.	Self-developed	Performance crafting
I seek out resources at work to better complete my tasks.	Self-developed	Performance crafting

3.1.2 Study 1 Sample and Procedure

I recruited 1,028 U.S. full-time workers via MTurk. They were asked to respond to an online questionnaire about overall job crafting behaviors and were compensated \$0.75 after completion. Their responses were based on a five-point Likert scale from 1 = *strongly disagree* to 5 = *strongly agree*.

To ensure data quality, I applied two screening methods to detect participants who may engage in insufficient effort responding (IER; Huang et al., 2012). IER refers to participants failing to follow survey instructions, pay attention to questionnaire items, or provide accurate answers. First, I inserted four infrequency items, also known as bogus items, on different web pages of the online questionnaire (about evenly distributed). Those items were “I eat cement occasionally”, “I was born on February the thirty-first”, “I can teleport across time and space”, and “I have never used a computer”. People who selected “strongly agree” or “agree” on more than two of those items were marked as potential IER participants. Second, I used recorded page time to screen those who responded too quickly. Given the relatively few and short items on each web page, I used 1 second per item as the threshold to determine potential IER participants in Study 1. For example, careful respondents are assumed to spend at least 6 seconds on a web page that has 6 survey items. I marked those who rushed to finish in more than half of the web pages of the online questionnaire. Together, the two methods identified 352 (34.24%) IER suspects, and their data were not used in the analysis. Therefore, the final sample size of Study 1 was 676.

The participants had an average age of 35.74 years old ($SD = 11.32$), and 40.4% of them were females. Most of them reported to be White (79.6%), while others being Asian (5.6%), Black or African American (2.4%), and American Indian or Alaska Native (2.2%). About 90.4%

of the participants had a bachelor's degree or above. They also reported to have worked for an average of 6.74 years in their current job and 6.19 years in the current organization.

3.2 Study 1 Results

I divided the sample into two random halves (approximately 50%): Subsample 1a ($N_{1a} = 304$) and Subsample 1b ($N_{1b} = 372$). Using Subsample 1a, I did exploratory factor analysis (EFA) of job crafting items to extract two underlying factors. The initial exploration of the results based on all the 36 items suggested 7 underlying factors that had eigenvalues larger than 1, and the items presented an unclear pattern of factor loadings. Because of this, I continued to explore by reducing some items that showed relatively low factor loadings ($<.30$) on the underlying factors or showed severe cross loadings on multiple factors. As a result, 18 items were retained, and another EFA was performed based on those items. Though this EFA result suggested 4 underlying factors that had eigenvalues larger than 1, the results of parallel analysis (Humphreys et al., 1963) supported two major factors as the eigenvalues of the first two factors using the actual data were larger than the results of EFA using simulative data (see Table 4). In addition, the scree plot (see Figure 4) showed that the first two factors appeared to be prominent. Therefore, the data suggested that there were two major underlying factors behind the job crafting item variables. In order to figure out the exact pattern of factor loadings, I conducted another EFA that forced only two factors of extraction. Table 5 reports the results. The results showed a clear pattern of factor loadings that supported the hypothesized two-factor structure. The two underlying factor axes were correlated at $-.63$. Together, the two factors explained 44.56% of the variances of items. These results were consistent with prior discussions on the theoretical basis of self-oriented crafting and job-oriented crafting. I thus named the two underlying factors as self-oriented crafting and job-oriented crafting, respectively.

Table 4. Parallel analysis

Factor	Eigenvalue	Explained Variances	Cumulative Explained Variances	Mean Eigenvalue of the simulative data	95 th Percentile Eigenvalue of the simulative data
1	6.493	36.07%	36.07%	1.459	1.550
2	1.527	8.48%	44.56%	1.364	1.422
3	1.214	6.74%	51.30%	1.299	1.353
4	1.091	6.06%	57.36%	1.235	1.279

Note. $N = 304$. Only factors with eigenvalues larger than 1 were displayed. A total of 100 random correlation matrices were generated in the simulative data.

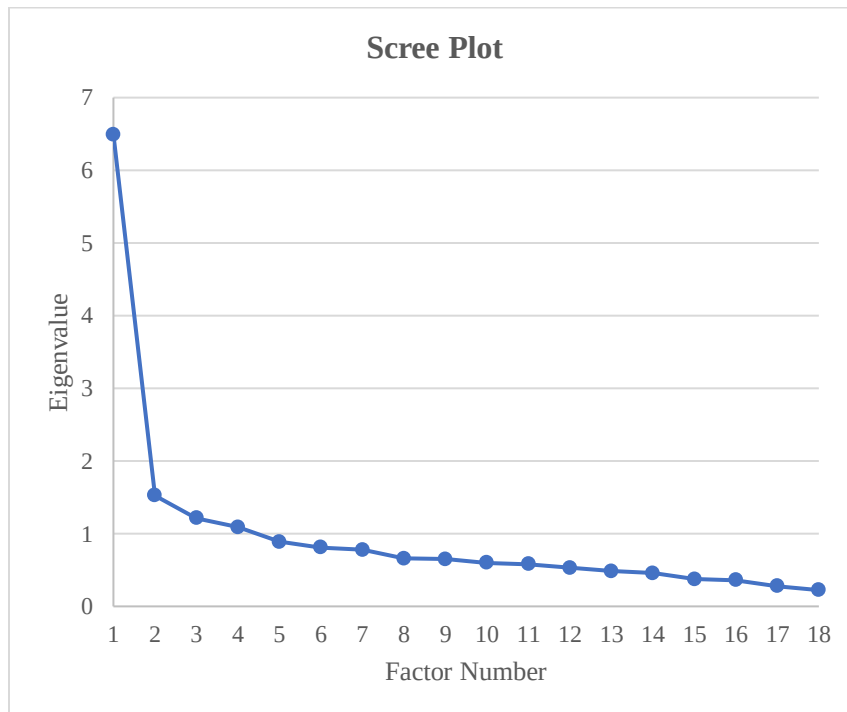
Figure 4. Scree plot of EFA

Table 5. Results of exploratory factor analysis of finalized job crafting items

Measurement items	Factor 1 loadings	Factor 2 loadings
<i>Self-oriented crafting</i>		
I try to develop my capabilities. ¹	-0.719	0.006
I actively explore new skills to do my overall job. ²	-0.568	0.122
I try to develop myself professionally. ¹	-0.319	0.280
I actively work to improve the quality of my social relationships at work. ³	-0.823	-0.114
I make efforts to get to know other people at work better. ²	-0.580	0.071
I put effort to manage my relationships with others at work. ⁴	-0.501	0.170
I use my thoughts to put myself into a good mood at work. ³	-0.834	-0.115
I think about the ways in which my work positively impacts my life. ⁵	-0.395	0.269
I consider how my work contributes to organizational goals. ⁴	-0.385	0.306
<i>Job-oriented crafting</i>		
I change my tasks so that they are more challenging. ²	0.112	0.653
I give preference to work tasks that suit my skills or interests. ⁵	-0.131	0.495
I seek out opportunities to make greater contributions at work. ⁴	-0.126	0.402
I use new knowledge or technology to structure my work. ³	-0.068	0.649
I improve work procedures to be more efficient. ⁵	0.049	0.496
I make a customized schedule to organize my work. ⁴	-0.044	0.537
I seek out resources at work to better complete my tasks. ⁴	0.045	0.670
I try to gain resources from work to help me do my job. ³	-0.135	0.417
I make an effort to secure necessary resources to enable me to fulfill my job responsibilities. ⁴	-0.283	0.316

Note. *N* = 304. Extraction method: principal axis factoring. Rotation method: Oblimin with Kaiser normalization. Item sources: ¹ Tims et al. (2012), ² Bindl et al. (2019), ³ Bruning & Campion (2018), ⁴ Self-developed, ⁵ Slemp & Vella-Brodrick (2013).

Using Subsample 1b, I did confirmatory factor analysis on job crafting items. Based on the EFA results above, I tested a two-factor model that regressed items on the corresponding factors. The model fit was adequate: $\chi^2(134) = 276.99$, RMSEA = .05, 90% CI = [.05, .06], CFI = .90, TLI = .88. The two factors were correlated at .70. I also tested two alternative models. In the first alternative model, I used only one factor to represent all items. The model fit was poor: $\chi^2(135) = 411.68$, RMSEA = .07, 90% CI = [.07, .08], CFI = .80, TLI = .78. In the other alternative model, I tested a second-order factor structure that identified three first-order factors that belonged to each one of the two second-order factors. In this model, the two second-order factors represented self-oriented crafting and job-oriented crafting, respectively, and the six first-order factors represented the content domains of self-oriented crafting and job-oriented crafting. Though this model showed acceptable model fit ($\chi^2(128) = 266.35$, RMSEA = .05, 90% CI = [.05, .06], CFI = .90, TLI = .88), the model reported negative residual variances of the first-order factors, which suggested model overfit. Thus, the hypothesized two-factor structure was supported in Study 1, and the results provided support to Hypothesis 1 that self-oriented crafting and job-oriented crafting are empirically distinct.

3.3 Study 2 Method

3.3.1 Study 2 Sample and Procedure

To replicate the findings in Study 1 and test the discriminant and predictive validity of self-oriented crafting and job-oriented crafting, I collected data from another sample of MTurk workers in the United States who did not participate in Study 1. A total of 577 participants provided responses to the online questionnaire, and they received \$1 as rewards after completion. Similar to the screening methods used in Study 1, I excluded participants who failed more than

two infrequency items and spent on average less than 1.5 seconds per item (Bowling et al., 2021) in their responses. After removing those IER suspects, the final sample size of Study 2 was 209.

The average age of the participants was 34.86 (SD = 10.86). Forty-seven percent of the participants were females. Most of them (77.4%) had a bachelor's degree or above. Regarding racial backgrounds, 77% of the participants were White, 6.5% were Asian, 2.3% were American Indian or Alaska Native, and 1.8% were Black or African American. On average, these participants worked 6.22 years in their current job and 5.52 years in the current organization. These sample characteristics were similar to that of Study 1.

3.3.2 Study 2 Measures

Self-oriented crafting. Nine items from Study 1 were used to measure self-oriented crafting (see Table 4). Responses were from 1 = *strongly disagree* to 5 = *strongly agree*. The Cronbach's alpha of this scale was .84.

Job-oriented crafting. Nine items from Study 1 were used to measure job-oriented crafting (see Table 4). Responses were from 1 = *strongly disagree* to 5 = *strongly agree*. The Cronbach's alpha of this scale was .80.

Networking behavior. I included the measure of networking behavior because it has conceptual overlaps with both self-oriented crafting and job-oriented crafting. Five items from Michael and Yukl (1993) were used to assess the frequency of workers' effort in building relationships with work colleagues. The items are "Attend meetings, ceremonies, or social events in the organization", "Form alliances with people in other units", "Do favors for people in other units", "Socialize with people in other work units", and "Go to lunch or dinner with people in other work units". Responses were from 1 = *never disagree* to 5 = *always*. The reliability of this measure was .79.

Informal field-based learning. I included the measure of informal field-based learning (IFBL) because it has conceptual overlaps with both self-oriented crafting and job-oriented crafting. I used 9 items from Wolfson et al.'s (2019) conceptual development to measure IFBL in three dimensions, including feedback/reflection-based learning, vicarious learning, and learning through experimentation/new experiences. Example items include "Seeking and receiving coaching or advice from job experts" (feedback/reflection-based learning), "Intentionally observing someone do his or her job" (vicarious learning), and "Performing a task in a new and different way" (learning through experimentation/new experiences). Responses were from 1 = *never disagree* to 5 = *always*. The reliability of the IFBL measure was .85.

Task performance. I included task performance as an outcome variable and used 4 items from Turnley et al. (2003) to measure it. Participants were asked to self-report if they agree with the statements describing task performance from 1 = *strongly disagree* to 5 = *strongly agree*. The items were "I have fulfilled all the responsibilities specified in my job description", "I consistently meet the formal performance requirements of my job", "I conscientiously perform tasks that are expected of me", and "I adequately complete all of my assigned duties". The internal consistency of this scale was .72.

Counterproductive work behavior. CWB was measured with 6 items from Dalal et al. (2009) focusing on deviant behaviors towards the organization. The measures include "I did not work to the best of my ability", "I spent time on tasks unrelated to work", "I criticized organizational policies", "I took an unnecessary break", "I worked slower than necessary", and "I spoke poorly about my organization to others". Responses were from 1 = *strongly disagree* to 5 = *strongly agree*. The reliability of this measure was .93.

3.4 Study 2 Results

Table 6 includes descriptive statistics of mean, standard deviation, reliability scores, and correlations between study variables. Self-oriented crafting and job-oriented crafting were strongly correlated at .73 but moderately correlated with networking behaviors and IFBL, ranging from .54 to .62. The results suggested that self-oriented crafting and job-oriented crafting are empirically different from networking behaviors and IFBL.

Table 6. Descriptive statistics of Study 2 variables

Variables	Mean	SD	1	2	3	4	5	6
1. Self-oriented crafting	4.19	0.53	(.84)					
2. Job-oriented crafting	4.04	0.53	.73**	(.80)				
3. Networking	3.62	0.76	.54**	.62**	(.79)			
4. IFBL	3.68	0.66	.58**	.61**	.73**	(.85)		
5. Task performance	4.12	0.60	.38**	.45**	.23**	.19**	(.72)	
6. CWB	2.57	1.19	-.29**	-.22*	.03	.00	-.31**	(.93)

Note. $N = 192$ - 209 . Reliability scores are in brackets along the diagonal. IFBL = informal field-based learning. CWB = counterproductive work behavior. * $p < .05$. ** $p < .01$.

I used confirmatory factor analysis to examine the hypothesized 2-factor structure of self-oriented crafting and job-oriented crafting. The model showed good fit to the data: $\chi^2(134) = 177.92$, RMSEA = .04, 90% CI = [.02, .05], CFI = .95, TLI = .94. To examine the discriminant validity of self-oriented crafting and job-oriented crafting, I tested two confirmatory factor analysis models that included the factors of networking behavior and IFBL. A four-factor structure showed good fit to the data: $\chi^2(458) = 614.83$, RMSEA = .03, 90% CI = [.04, .05], CFI = .92, TLI = .91. I tested two alternative models against this four-factor model. In one model, I used one factor to predict items measuring self-oriented crafting and networking behaviors and another factor to predict items measuring job-oriented crafting and IFBL. The model had poor fit: $\chi^2(463) = 777.94$, RMSEA = .06, 90% CI = [.05, .06], CFI = .84, TLI = .83. In the other model, I collapsed items of self-oriented crafting and IFBL into one and those of job-oriented

crafting and networking behaviors into another one. The model also showed poor fit: $\chi^2(463) = 786.73$, RMSEA = .06, 90% CI = [.05, .07], CFI = .84, TLI = .82. The results provided support to the discriminant validity of self-oriented crafting and job-oriented crafting.

Finally, I tested the predictive validity of self-oriented crafting and job-oriented crafting by examining the effect of self-oriented crafting, job-oriented crafting, networking behavior, and IFBL on the outcomes of task performance and CWB. Table 7 reports the results.

Table 7. Model results of Study 2 variables

Predictors	DV: Task performance			DV: CWB		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
Self-oriented crafting	.16	.17	.34	-.84	.23	< .001
Job-oriented crafting	.51	.15	< .01	-.42	.23	.07
Networking	-.01	.09	.94	.38	.15	< .05
IFBL	-.14	.10	.14	.30	.18	.11

Note. *N* = 209. IFBL = informal field-based learning. CWB = counterproductive work behavior.

Self-oriented crafting ($b = -.84$, $SE = .23$, $p < .001$) and networking behavior ($b = .38$, $SE = .15$, $p < .05$) were significantly associated with CWB. By contrast, job-oriented crafting ($b = -.42$, $SE = .23$, $p = .07$) and IFBL ($b = .30$, $SE = .18$, $p = .11$) were not associated with CWB. In addition, job-oriented crafting ($b = .51$, $SE = .15$, $p < .01$) but not self-oriented crafting ($b = .16$, $SE = .15$, $p = .34$) was significantly associated with task performance. The effect of networking behavior ($b = -.01$, $SE = .09$, $p = .94$) and IFBL ($b = -.14$, $SE = .10$, $p = .14$) were not significant on task performance. These results suggested that self-oriented crafting and job-oriented crafting were empirically distinct from networking behavior and IFBL. More importantly, self-oriented crafting and job-oriented crafting also showed unique impact on CWB and task performance.

In sum, the findings from Study 1 and Study 2 supported Hypothesis 1, which argued that self-oriented crafting and job-oriented crafting are empirically different from each other. In addition, the results of Study 2 provided support to Hypothesis 6 and Hypothesis 7 that suggested

that self-oriented crafting and job-oriented crafting will be more strongly related to CWB and task performance, respectively.

3.5 Study 3 Method

3.5.1 Study 3 Sample and Procedure

Study 3 data were from a sample of full-time working adults from China who came from several different organizations and voluntarily agreed to participate in this study. At first, an online questionnaire was sent to 483 people, among which 401 responded (response rate = 83%). After about three weeks, a second online questionnaire was sent to the same group of people, and 295 of them responded (response rate = 61%). Respondents were paid 10 RMB (approximately \$1.5) for participation in each wave of the online questionnaire. I used the same approach (i.e., attention check items and page time) as in Study 1 and Study 2 to screen IER cases. Responses to the first questionnaire from 17 participants were marked as IER suspects, and their data were not used in the analysis. There was no evidence of IER in the second response wave. As a results, a final sample of 420 people (87%) who responded to at least one of the questionnaires was retained for analysis.

The participants had an average age of 32.58 (SD = 5.16), and 51.9% of them were females. They worked in various industries, such as finance (19.5%), education (15.7%), real estate (13.1%), and information technology (6.2%). On average, they had 8.38 years of work experiences and had been working in their current organizations for 4.88 years. A majority of them reported to have either a bachelors' (26.0%), master's (40.7%), or doctoral (11.7%) degree as their highest level of education.

3.5.2 Measures

I used the back-translation approach (Brislin, 1970) to translate all measurement items from English to Chinese. Perceived supervisor support, affective commitment, task-contingent conscientiousness, self-oriented crafting, job-oriented crafting, and control variables were measured in the first survey; task performance and CWB were measured in the second survey. All responses were based on a 5-point Likert scale.

Perceived supervisor support. I used 12 items from Blume et al. (2022) to measure perceived supervisor support in two dimensions: emotional support (6 items; $\alpha = .90$) and instrumental support (6 items; $\alpha = .90$). An example item of supervisor emotional support is “My supervisor gave me encouragement to continue doing my job”, and an example item of supervisor instrumental support is “My supervisor told me the best way to do my job”.

Affective commitment. Four items from Allen and Meyer (1990) were used to assess individuals’ affective commitment towards organization. The items are “I would be very happy to spend the rest of my career with this organization”, “I enjoy discussing my organization with people outside it”, “I really feel as if this organization’s problems are my own”, and “This organization has a great deal of personal meaning for me”. The reliability of this measure was .79.

Task-contingent conscientiousness. I used 6 items from Huang and Bramble (2016) to measure task-contingent conscientiousness. An example item is “When faced with difficult tasks, I tend to work harder on them than on other tasks”. The reliability of this measure was .91.

Self-oriented crafting. The same 9 items used in Study 2 were used to measure self-oriented crafting ($\alpha = .77$). Participants were asked to report the frequency of engaging in the described behaviors during the past few weeks from 1 = *Never* to 5 = *A great deal*.

Job-oriented crafting. I used 9 items from Study 2 to measure job-oriented crafting, and the participants were asked to report the frequency of doing job-oriented crafting during the past few weeks from 1 = *Never* to 5 = *A great deal*. The Cronbach's alpha of this scale was .77.

Task performance. The same scale items ($\alpha = .89$) as in Study 2 were used in the second wave of Study 3 to measure task performance.

Counterproductive work behavior. As in Study 2, CWB ($\alpha = .89$) was measured using the same instrument in the second survey in Study 3.

Control variables. Proactive personality was found to be a strong individual difference factor of job crafting (Rudolph et al., 2017). I measured proactive personality ($\alpha = .80$) with six items from Claes et al. (2005). An example item is "If I see something I don't like, I fix it". As trait conscientiousness shares conceptual links with task-contingent conscientiousness (Huang & Bramble, 2016; Minbashian et al., 2010) and it could be another precursor of job crafting (Rudolph et al., 2017), I included it as another individual difference control variable. Five items from the International Personality Item Pool (IPIP; Goldberg et al., 2006) were used to measure trait conscientiousness. An example item is "Am always prepared". For demographic control variables, I included age, organizational tenure, job tenure, and highest education level, because these variables reflect one's overall experiences in the workplace, and as workers develop themselves and become more familiar with their job and work context, they could have more ideas and opportunities of job crafting.

Fit variables. Prior discussions suggest that self-oriented crafting and job-oriented crafting regulate the person-job relationship in different ways. I thus included person-job fit and person-organization fit alternative outcome variables to explore the differential associations with self-oriented crafting and job-oriented crafting. Person-job fit was assessed in two dimensions:

needs-supplies (NS) fit and demands-abilities (DA) fit. Three items from Cable and DeRue (2002) were used to measure NS fit, including “There is a good fit between what my job offers me and what I am looking for in a job”, “The attributes that I look for in a job are fulfilled very well by my present job”, and “The job that I currently hold gives me just about everything that I want from a job”. DA fit was measured with 3 items from Cable and Judge (1996), including “The match is very good between the demands of my job and my personal skills”, “My abilities and training are a good fit with the requirements of my job”, and “My personal abilities and education provide a good match with the demands that my job places on me”. I used 3 items from Cable and DeRue (2002) to measure person-organization (PO) fit. These items include “The things that I value in life are very similar to the things that my organization values”, “My personal values match my organization’s values and culture”, and “My organization’s values and culture provide a good fit with the things that I value in life”. NS fit, DA fit, and PO fit were all measured at the second time point in Study 3.

3.6 Study 3 Results

Table 8 presents the descriptive statistics of major study variables. Self-oriented crafting and job-oriented crafting were correlated at .63 ($p < .01$), suggesting the two variables are conceptually different yet overlapping. They were both positively correlated with supervisor support at .30s ($p < .01$). In comparison with self-oriented crafting, job-oriented crafting showed a relatively stronger correlation with task performance. But they had similar correlations with CWB at -.31 ($p < .01$). I also examined the pattern of missing data in these variables using Little’s (1998) missing completely at random (MCAR) test. The results suggested that the data were missing completely at random: $\chi^2(85) = 102.48, p = .10$. I thus used full information maximum likelihood (FIML) to deal with data missingness across two measurement occasions.

Table 8. Descriptive statistics of Study 3 variables

Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Emotional support	3.31	0.83	(.90)												
2. Instrumental support	3.19	0.86	.79**	(.90)											
3. Affective commitment	3.25	0.82	.40**	.38**	(.79)										
4. Task-contingent CON	4.03	0.61	.25**	.21**	.28**	(.91)									
5. Self-oriented crafting	3.53	0.61	.31**	.32**	.45**	.31**	(.77)								
6. Job-oriented crafting	3.57	0.53	.34**	.33**	.29**	.31**	.63**	(.77)							
7. Task performance	4.21	0.56	.12	.11	.13*	.19**	.20**	.23**	(.89)						
8. CWB	2.81	0.73	-.24**	-.22**	-.33**	-.18**	-.31**	-.31**	-.32**	(.80)					
9. Proactive personality	3.70	0.54	.23**	.24**	.33**	.36**	.52**	.46**	.14*	-.28**	(.80)				
10. Trait CON	3.96	0.52	.22**	.24**	.23**	.32**	.42**	.38**	.33**	-.24**	.46**	(.79)			
11. PO fit	3.58	0.73	.40**	.41**	.60**	.18**	.37**	.27**	.21**	-.35**	.34**	.25**	(.88)		
12. NS fit	3.28	0.78	.32**	.31**	.50**	.15*	.33**	.30**	.15*	-.31**	.28**	.17**	.53**	(.81)	
13. DA fit	3.89	0.68	.19**	.15*	.32**	.15*	.21**	.23**	.25**	-.26**	.23**	.22**	.30**	.47**	(.83)

Note. $N = 292-384$. Reliability scores are in brackets along the diagonal. CON = conscientiousness. CWB = counterproductive work behavior. PO fit = person-organization fit. NS fit = needs-supplies fit. DA fit = demands-abilities fit.

* $p < .05$. ** $p < .01$.

3.6.1 Results of Measurement Model Testing

Before I tested the hypotheses, I first examined the measurement models of major study variables. Given the modest sample size, I created item parcels for variables measured with more than 4 items to reduce model complexity. Following the approach introduced by Little et al. (2002), I used the internal-consistency approach to retain the underlying dimensions of multi-facet constructs (i.e., self-oriented job crafting, job-oriented crafting, and perceived supervisor support) as parceling units; for unidimensional constructs (i.e., task-contingent conscientiousness and CWB), I used the item-to-construct balance parceling approach to create item parcels. Affective commitment and task performance were included in the measurement models without parceling the items. The results of measurement model testing are presented in Table 9.

Table 9. Results of confirmatory factor analysis of Study 3 variables

Model	χ^2	<i>df</i>	RMSEA [90% CI]	CFI	TLI
Model 1: hypothesized 8 factors	499.48	271	0.05 [0.04, 0.05]	0.95	0.94
Model 2: multi-facet construct in one	626.49	284	0.05 [0.05, 0.06]	0.92	0.91
Model 3: SES and AC in one	908.23	278	0.07 [0.07, 0.08]	0.86	0.84
Model 4: SIS and TCON in one	1201.11	278	0.09 [0.08, 0.09]	0.80	0.76
Model 5: Performance in one	748.21	278	0.06 [0.06, 0.07]	0.90	0.88

Note. *N* = 420. SES = supervisor emotional support; AC = affective commitment; SIS = supervisor instrumental support; TCON = task-contingent conscientiousness; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker-Lewis fit index.

Model 1 tested the hypothesized 8-factor model that identified the latent factors of supervisor emotional support, supervisor instrumental support, affective commitment, task-contingent conscientiousness, self-oriented crafting, job-oriented crafting, task performance, and CWB. The model showed good fit to the data. Model 2 tested an alternative model that collapsed each multi-facet construct (i.e., supervisor support, job crafting) into one factor. As a result, this 6-factor model showed decreased fit to the data. Model 3 and Model 4 combined the factors in potential interaction relationships into one factor. Both models showed poor fit to the data.

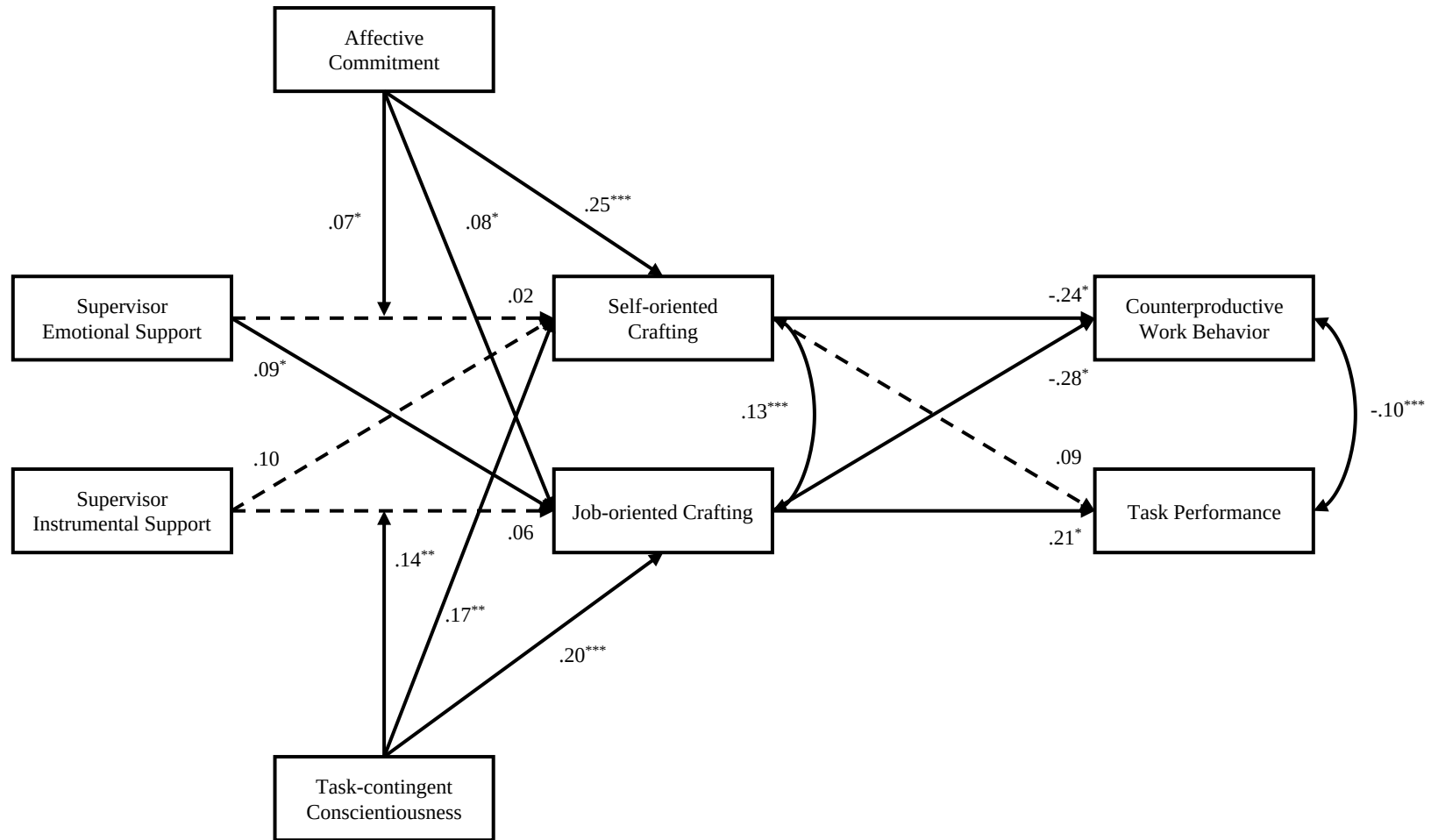
Model 5 regarded performance outcome variables as one underlying factor, and its model fit was insufficient in comparison with Model 1. Therefore, the hypothesized 8-factor model was supported.

3.6.2 Hypothesis Testing

I first established an intermediate analytical model based on the conceptual model shown in Figure 3. Figure 5 presents this intermediate analytical model. The model showed good fit to the data: $\chi^2(14) = 27.79$, RMSEA = .05, 90% CI = [.02, .08], CFI = .96, TLI = .92. As the goal of this research is to investigate how self-oriented crafting versus job-oriented crafting have differential relationships with other constructs, it is necessary to include two additional paths in the analytical model: 1) the joint effect of supervisor emotional support and affective commitment on job-oriented crafting, and 2) the joint effect of supervisor instrumental support and task-contingent conscientiousness on self-oriented crafting. Though these crossed interactive relationships were not hypothesized, including them in the analytical model provides a comprehensive view of the influence of boundary conditions on job crafting engagement.

Hence, I tested an alternative model that included the two additional interactive influences (see Figure 6). This model showed good fit to the data: $\chi^2(12) = 21.02$, RMSEA = .04, 90% CI = [.00, .07], CFI = .97, TLI = .94. Comparing it with the model shown in Figure 5, this model had increased fit to the data: $\Delta\chi^2(2) = 6.23$, $p < .05$. I thus retained the model in Figure 6 as the final model to test research hypotheses. It is worth noting that results of the hypothesized relationships in the two models were identical.

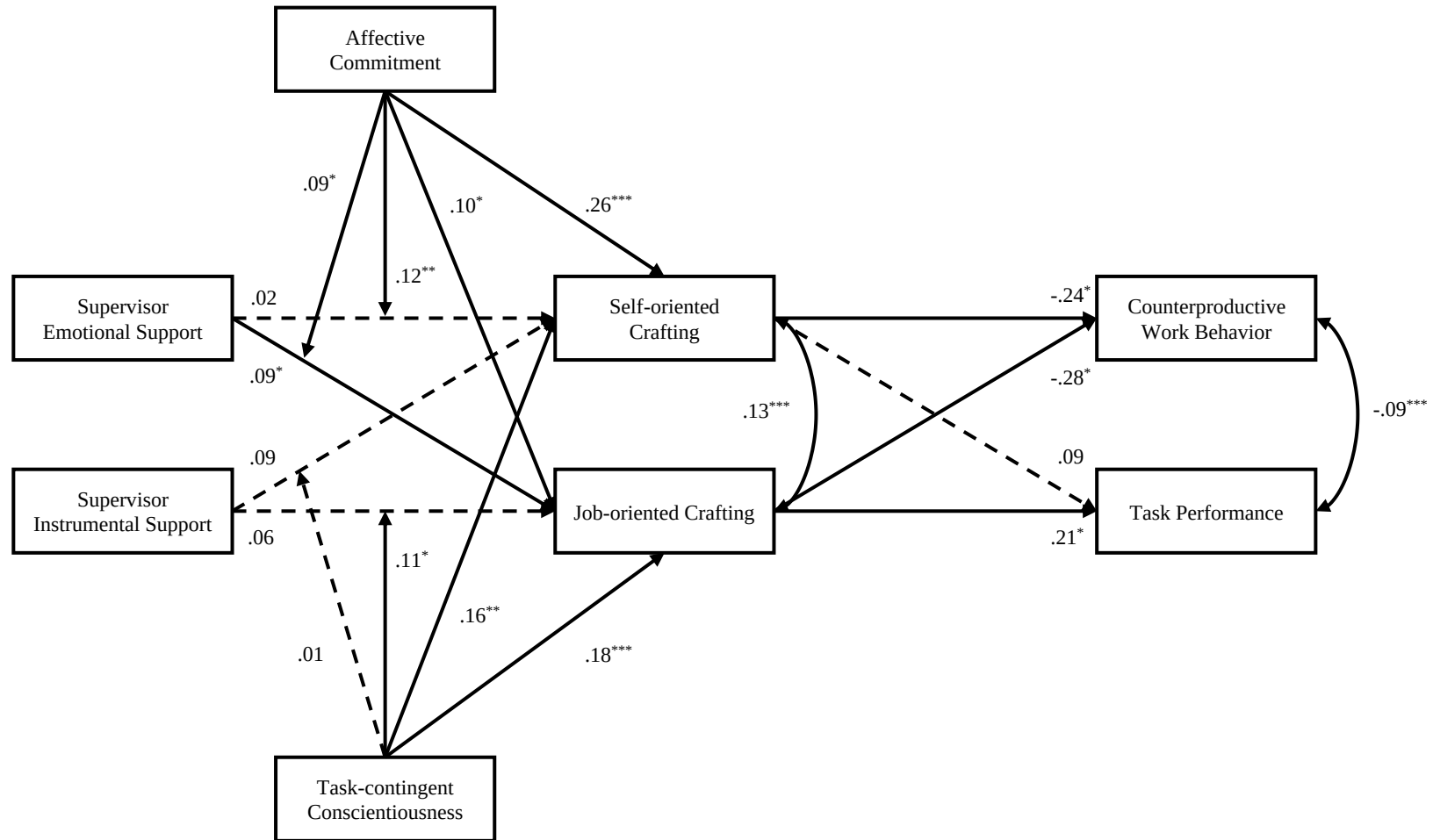
Figure 5. Intermediate analytical model



Note. $N = 420$. Solid lines represent significant path coefficients; dashed lines represent nonsignificant results. Covariances between exogenous variables were not illustrated for simple presentation.

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

Figure 6. Results of hypothesized model testing



Note. $N = 420$. Solid lines represent significant path coefficients; dashed lines represent nonsignificant results. Covariances between exogenous variables were not illustrated for simple presentation.

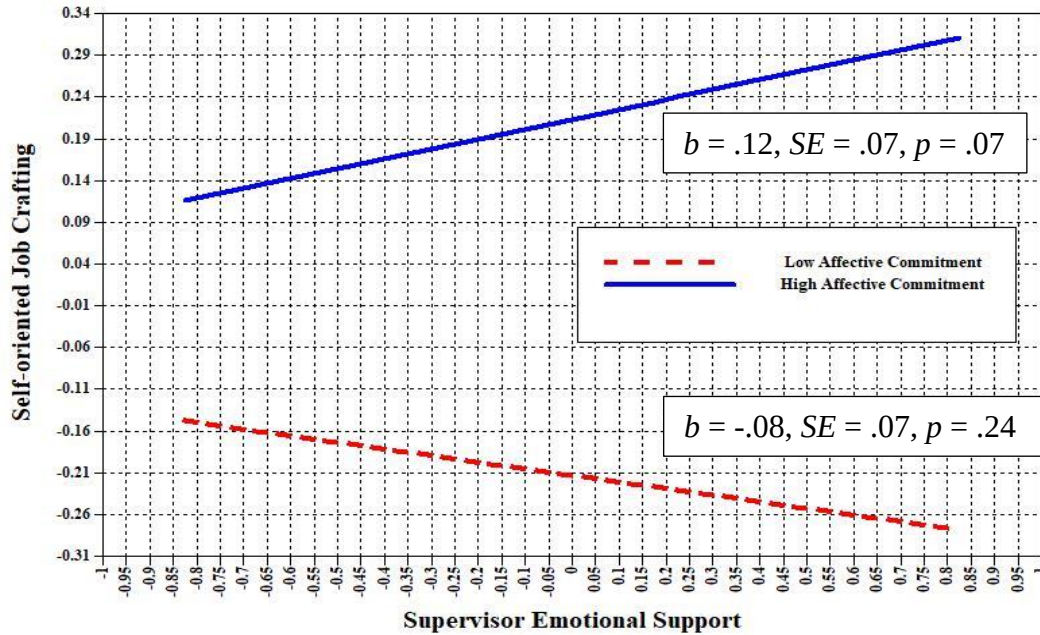
* $p < .05$. ** $p < .01$. *** $p < .001$.

Hypothesis 2 and 3 respectively suggested that supervisor emotional support and instrumental support will be more strongly related to self-oriented crafting and job-oriented crafting. Supervisor emotional support was found to be positively related to job-oriented crafting ($b = .09$, $SE = .04$, $p < .05$) but not related to self-oriented crafting ($b = .02$, $SE = .06$, $p = .73$); supervisor instrumental support was not significantly related to job-oriented crafting ($b = .06$, $SE = .04$, $p = .19$) and self-oriented crafting ($b = .09$, $SE = .06$, $p = .10$). Thus, Hypothesis 2 and 3 were not supported in Study 3.

Hypothesis 4 argued that affective commitment moderates the relationship between supervisor emotional support and self-oriented crafting, such that the relationship is stronger when affective commitment is higher. This hypothesis was supported, as the interaction term of affective commitment and supervisor emotional support was positively associated with self-oriented crafting ($b = .12$, $SE = .04$, $p < .01$).

Figure 7 plots the simple slopes of the association when affective commitment was high (+1 SD) versus low (-1 SD). Though the two simple slopes were not significant at ± 1 SD of affective commitment, I explored at what level of affective commitment would the association between supervisor emotional support and self-oriented crafting become significant. I found that when affective commitment was at +1.15 SD, the simple slope became significant ($b = .13$, $SE = .07$, $p = .049$). Hence, when affective commitment was high, individuals receiving supervisor emotional support would be more likely to engage in self-oriented crafting.

Figure 7. Interaction between affective commitment and supervisor emotional support

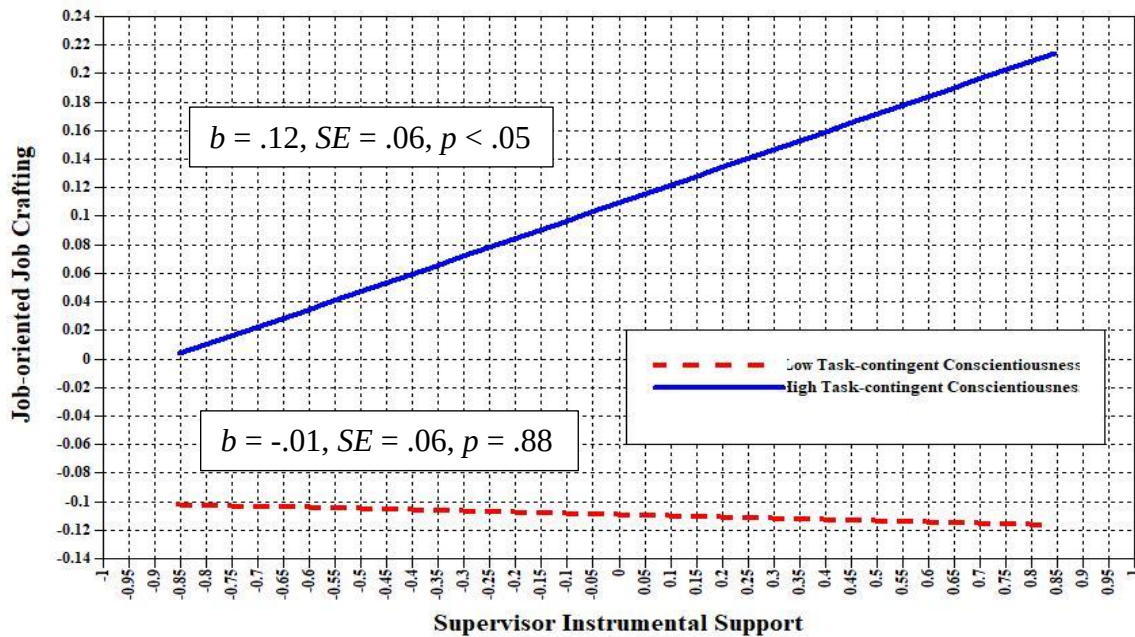


Hypothesis 5 argued that task-contingent conscientiousness moderates the relationship between supervisor instrumental support and job-oriented crafting, such that the relationship is stronger when task-contingent conscientiousness is higher. This hypothesis was also supported, as the interaction term of task-contingent conscientiousness and supervisor instrumental support was positively associated with job-oriented crafting ($b = .11, SE = .06, p < .05$).

Figure 8 depicted the simple slopes of the relationship when task-contingent conscientiousness was high (+1 SD) versus low (-1 SD). It was found that compared with the condition of low task-contingent conscientiousness ($b = -.01, SE = .06, p = .88$), the relationship between supervisor instrumental support and job-oriented crafting became stronger when task-contingent conscientiousness was high ($b = .12, SE = .06, p < .05$). By contrast, the interaction effect did not significantly influence self-oriented crafting. Thus, people receiving supervisor instrumental support would be more likely to engage in job-oriented crafting when they had a higher level of task-contingent conscientiousness.

Figure 8. Interaction between task-contingent conscientiousness and supervisor

instrumental support



I continue to examine differential predictions of outcome variables using self-oriented crafting and job-oriented crafting. Hypothesis 6 and 7 stated that self-oriented crafting and job-oriented crafting are more strongly related to CWB and task performance, respectively. It was found that both self-oriented crafting ($b = -.24, SE = .11, p < .05$) and job-oriented crafting ($b = -.28, SE = .13, p < .05$) were negatively related to CWB, but the difference in strength was not significant. Thus, Hypothesis 6 was not supported in Study 3. By contrast, job-oriented crafting was significantly related to task-performance ($b = .21, SE = .08, p < .05$), but the association between self-oriented crafting and task performance was not significant ($b = .09, SE = .09, p = .34$). Thus, Hypothesis 7 was supported.

To test the indirect effect of supervisor emotional support and instrumental support on outcome variables via self-oriented crafting and job-oriented crafting, I first examined the model fit of a partial mediation model and compared it with the full mediation model as shown in Figure 6. In the partial mediation model, I included the direct effects of supervisor emotional

support and instrumental support on task performance and CWB. The model showed good fit to the data: $\chi^2(8) = 15.59$, RMSEA = .05, 90% CI = [.00 .08], CFI = .98, TLI = .92. But the model comparison based on chi-square difference test was not significant ($\Delta\chi^2(4) = 4.89$, $p = .30$). It thus supported the more parsimonious full mediation model. In addition, all direct effects of supervisor emotional support and instrumental support on task performance and CWB were not significant. Hence, I retained the full mediation model to test the indirect effect.

Table 10 presents the indirect effect of supervisor emotional support and instrumental support on outcome variables via self-oriented crafting and job-oriented crafting. I used 5000 bootstrapped samples to test indirect effects. Hypothesis 8 argued that self-oriented crafting partially mediates the effect of supervisor emotional support on CWB, and Hypothesis 9 suggested that job-oriented crafting partially mediates the influence of supervisor instrumental support on task performance. Modeling the parallel indirect paths together, the results showed that self-oriented crafting did not mediate the indirect effect of supervisor emotional support on CWB (*indirect effect* = -.01, 95% CI = [-.04 .02]), but job-oriented crafting mediated the indirect effect of supervisor instrumental support on task performance (*indirect effect* = .02, 95% CI = [.002 .06]). Thus, Hypothesis 9 was supported, but Hypothesis 8 was not supported.

Hypothesis 10 suggested that when affective commitment is high, the indirect effect of supervisor emotional support on CWB becomes stronger. This hypothesis was supported, as the 95% confidence interval of the indirect effect of supervisor emotional support on CWB via self-oriented crafting when affective commitment was at +1 SD did not include zero (*indirect effect* = -.03, 95% CI = [-.09 -.001]). Similarly, Hypothesis 11 was also supported, as the 95% confidence interval of the indirect effect of supervisor instrumental support on task performance

via job-oriented crafting when task-contingent conscientiousness was at +1 SD did not include zero, too (*indirect effect* = .04, 95% CI = [.01 .09]).

Table 10. Results of indirect effect testing

Moderator	Path	Indirect effect	Lower 2.5%	Higher 2.5%
+1 SD AC	EMO support→Self-oriented crafting→CWB	-.03	-.09	-.001
0 SD AC	EMO support→Self-oriented crafting→CWB	-.01	-.04	.02
-1 SD AC	EMO support→Self-oriented crafting→CWB	.02	-.01	.08
+1 SD AC	EMO support→Self-oriented crafting→TP	.01	-.01	.05
0 SD AC	EMO support→Self-oriented crafting→TP	.002	-.01	.03
-1 SD AC	EMO support→Self-oriented crafting→TP	-.01	-.05	.01
+1 SD AC	EMO support→Job-oriented crafting→CWB	-.05	-.12	-.01
0 SD AC	EMO support→Job-oriented crafting→CWB	-.03	-.08	-.001
-1 SD AC	EMO support→Job-oriented crafting→CWB	-.01	-.05	.03
+1 SD AC	EMO support→Job-oriented crafting→TP	.04	.01	.09
0 SD AC	EMO support→Job-oriented crafting→TP	.02	.002	.06
-1 SD AC	EMO support→Job-oriented crafting→TP	.004	-.02	.03
+1 SD TCON	INS support→Self-oriented crafting→CWB	-.02	-.08	.004
0 SD TCON	INS support→Self-oriented crafting→CWB	-.02	-.08	.001
-1 SD TCON	INS support→Self-oriented crafting→CWB	-.02	-.09	.01
+1 SD TCON	INS support→Self-oriented crafting→TP	.01	-.01	.05
0 SD TCON	INS support→Self-oriented crafting→TP	.01	-.01	.04
-1 SD TCON	INS support→Self-oriented crafting→TP	.01	-.01	.05
+1 SD TCON	INS support→Job-oriented crafting→CWB	-.03	-.10	-.002
0 SD TCON	INS support→Job-oriented crafting→CWB	-.02	-.06	.004
-1 SD TCON	INS support→Job-oriented crafting→CWB	.002	-.03	.04
+1 SD TCON	INS support→Job-oriented crafting→TP	.04	.01	.09
0 SD TCON	INS support→Job-oriented crafting→TP	.02	.002	.06
-1 SD TCON	INS support→Job-oriented crafting→TP	.004	-.02	.03

Note. $N = 420$. Bootstrapping = 5000. Significant indirect effects are in bold. EMO = supervisor emotional support. INS = supervisor instrumental support. CWB = counterproductive work behavior. TP = task performance. AC = affective commitment. TCON = task-contingent conscientiousness.

The results of indirect effect testing also showed that job-oriented crafting mediated the effect of supervisor emotional support on CWB and task performance, and the indirect effect became stronger when affective commitment was higher. Job-oriented crafting mediated the indirect effect of supervisor instrumental support on CWB when task-contingent conscientiousness was high.

3.6.3 Robustness Check of Model Results

I tested the robustness of the model results by controlling for some relevant variables that may influence one's engagement in job crafting. Proactive personality was found to be a strong factor that is associated with job crafting (Rudolph et al., 2017). In Study 3, proactive personality was positively related to self-oriented crafting ($r = .52, p < .01$) and job-oriented crafting ($r = .46, p < .01$). This is consistent with the meta-analytical finding in Rudolph et al.'s study ($\rho = .47$). In addition to the main effect of proactive personality on job crafting, there is reason to expect proactive personality to interact with supervisor support because people with high proactive personality might better utilize the support their supervisors provide. Proactive individuals actively search for opportunities to make change, and upon receiving support from the supervisor, they will be more likely to transfer these resources into actions and make meaningful changes to the job. Thus, I included both the main effect and interactive effect of proactive personality on self-oriented crafting and job-oriented crafting. The model showed good fit to the data: $\chi^2(18) = 33.14$, RMSEA = .05, 90% CI = [.02, .07], CFI = .96, TLI = .92, and the results of hypothesis testing remained unchanged.

Considering the conceptual link between task-contingent conscientiousness and trait-conscientiousness, I controlled in another model the potential influence of trait conscientiousness on job crafting variables. The model showed adequate fit to the data: $\chi^2(14) = 35.51$, RMSEA

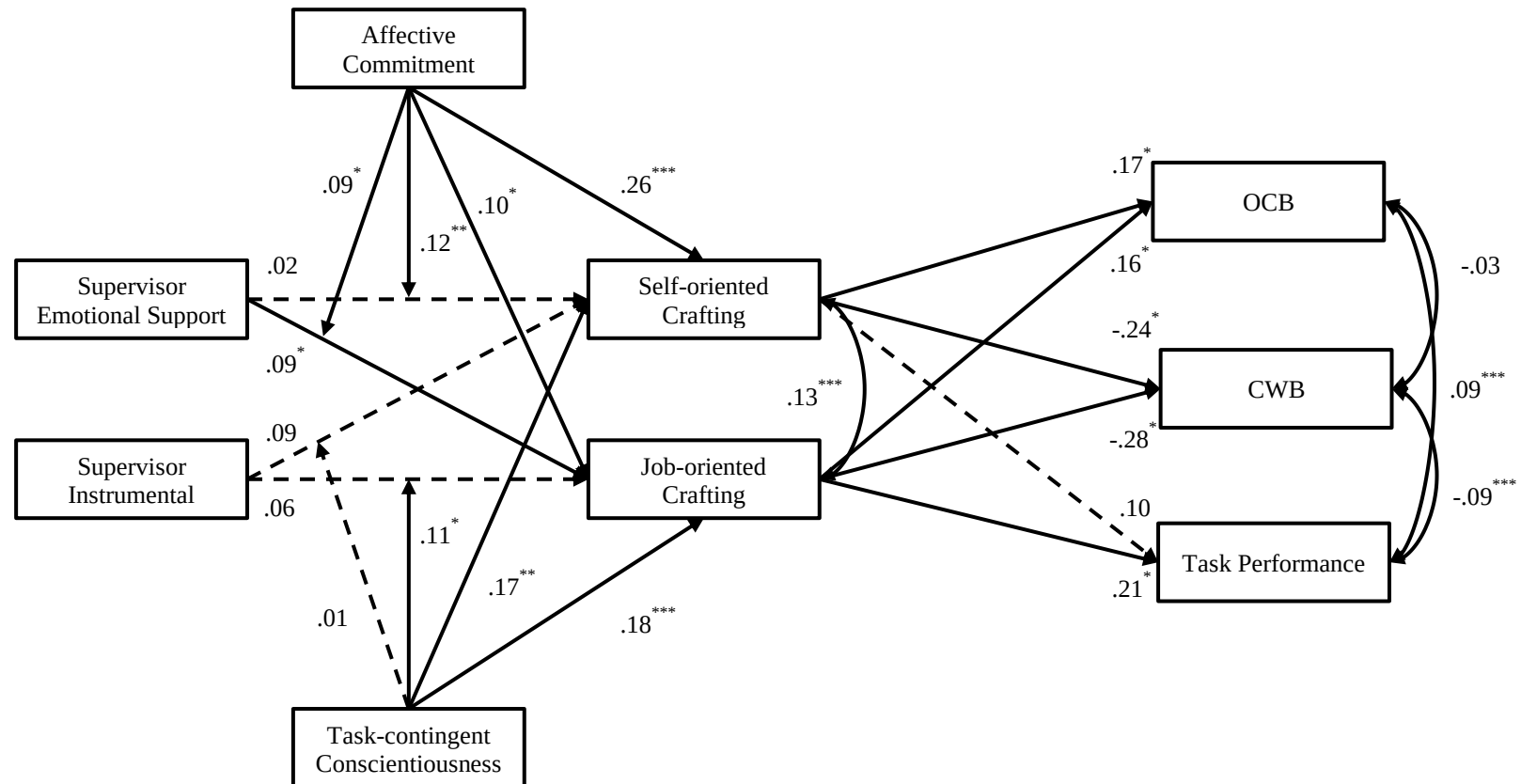
= .06, 90% CI = [.04, .09], CFI = .95, TLI = .87, and the results of hypothesis testing remained unchanged.

I also examined the results of controlling demographic variables in separate models, including age, organizational tenure, job tenure, and highest education level. All these models showed adequate fit to the data, and the model results remained unchanged. It is worth noting that age and job tenure were not significantly related to job crafting variables, but organizational tenure was negatively related to self-oriented crafting ($b = -.01$, $SE = .01$, $p < .05$) but not job-oriented crafting ($b = -.01$, $SE = .01$, $p = .23$), though the effect size was rather small. As for education, I dummy coded people with different levels of education, and the results showed that compared with people with less than college degree, those with doctoral degrees appeared to craft less towards themselves ($b = -.29$, $SE = .13$, $p < .05$).

3.7 Exploratory Results of Using OCB and Fit Variables as Additional Outcomes

Given that OCB represents another type of performance outcomes in addition to task performance and CWB (Rotundo & Sackett, 2002), it is interesting to explore how OCB as extra-role behaviors, compared with the other two performance outcomes, can be influenced by self-oriented crafting and job-oriented crafting. OCB was measured in the second wave of survey in Study 3 with 4 items from Dalal et al. (2009) focusing on citizenship behavior towards individuals. The items include “Was respectful of other people’s needs”, “Praised or encouraged someone”, “Showed genuine concern for others”, and “Tried to be considerate to others”. Responses were from 1 = *strongly disagree* to 5 = *strongly agree*. The reliability of this measure was .80. Results of this model testing are shown in Figure 9.

Figure 9. Exploratory model results of including OCB as another outcome



Note. $N = 420$. Solid lines represent significant path coefficients; dashed lines represent nonsignificant results. Covariances between endogenous and exogenous variables were not illustrated for simple presentation. OCB = organizational citizenship behavior. CWB = counterproductive work behavior.

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

The model showed good fit to the data: $\chi^2(18) = 36.57$, RMSEA = .05, 90% CI = [.03, .07], CFI = .96, TLI = .90. While other results remained unchanged, both self-oriented crafting ($b = .17$, $SE = .07$, $p < .05$) and job-oriented crafting ($b = .16$, $SE = .08$, $p < .05$) were significantly related to OCB, and there was no difference in these effects. Though the findings suggested that individuals crafting towards the self and the job would all engage in OCB, they may go through different mechanisms. For instance, whereas individuals crafting the self may be more willing to go beyond their roles to help others in the organization, individuals crafting the job may free up personal resources for extra tasks after they have completed their own work tasks.

I also consider person-job fit and person-organization fit as alternative outcome variables. Although they are not the focus of this investigation and their relationships with job crafting may be dynamic and quite complex, I am interested in providing some initial evidence about the differential predictions using self-oriented crafting and job-oriented crafting.

Individuals use job crafting to improve person-job fit (Tims et al., 2012; Wrzesniewski & Dutton, 2001). For instance, Tims et al.'s (2016) found in a three-wave repeated measures longitudinal study that job crafting positively predicted NS fit and DA fit. As self-oriented crafting and job-oriented crafting regulate the person-job relationship in different ways, it is possible that both crafting types are associated with NS fit and DA fit.

Furthermore, I expect self-oriented crafting but not job-oriented crafting to associate with person-organization fit, defined as the compatibility between the person and the organization regarding values, goals, and cultures (Kristof-Brown et al., 2005). This is because self-oriented crafting, as it facilitates self-development in the organization, may reduce one's social distance with the organization and contribute to the feeling of ownership of the organization. As a result,

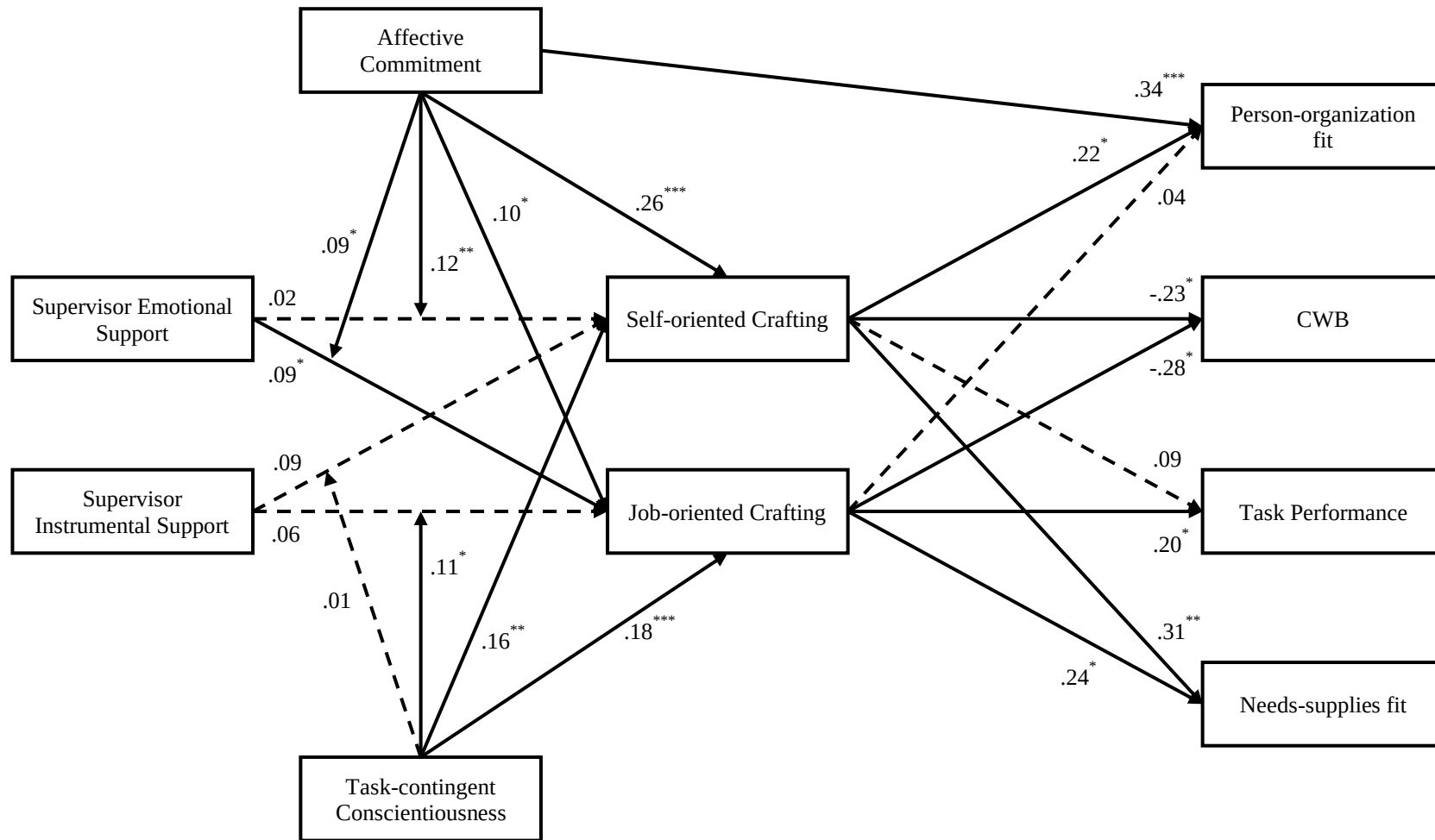
workers will be more likely to embrace organizational values, goals, and cultures. By contrast, job-oriented crafting only attends to work tasks at hands, thus having a farther link with PO fit.

I explored the results of this model (see Figure 10¹). The model showed adequate fit to the data: $\chi^2(23) = 70.44$, RMSEA = .07, 90% CI = [.05, .09], CFI = .92, TLI = .82. The results of variables predicting self-oriented crafting and job-oriented crafting were similar to the hypothesized model results shown in Figure 6. It was interesting to find that self-oriented crafting was significantly associated with PO fit ($b = .22$, $SE = .10$, $p < .05$), but job-oriented crafting was not ($b = .04$, $SE = .09$, $p = .64$). This is consistent with Kim et al.'s (2018) finding that relational and cognitive crafting (cf., self-oriented crafting) but not task crafting (cf., job-oriented crafting) predicted PO fit. Furthermore, the results also showed that job-oriented crafting was significantly associated with task performance ($b = .20$, $SE = .08$, $p < .05$), but self-oriented crafting was not ($b = .09$, $SE = .09$, $p = .30$). In addition, both self-oriented crafting ($b = .31$, $SE = .10$, $p < .01$) and job-oriented crafting ($b = .24$, $SE = .11$, $p < .05$) were significantly related to PJ fit in terms of NS fit, and both were significantly related to CWB.

These findings suggest that self-oriented crafting and job-oriented crafting have unique relationships with different types of work outcomes. Whereas self-oriented crafting would be more strongly related to variables that share attitudinal and affective bases with the individual self, job-oriented crafting would be more strongly related to variables that indicate the specific, concrete, and instrumental aspects of one's work.

¹ Neither self-oriented crafting nor job-oriented crafting was found to be associated with DA fit. So, DA fit was excluded from the analysis in the reported model in Figure 8.

Figure 10. Exploratory model results of using fit variables as alternative outcomes



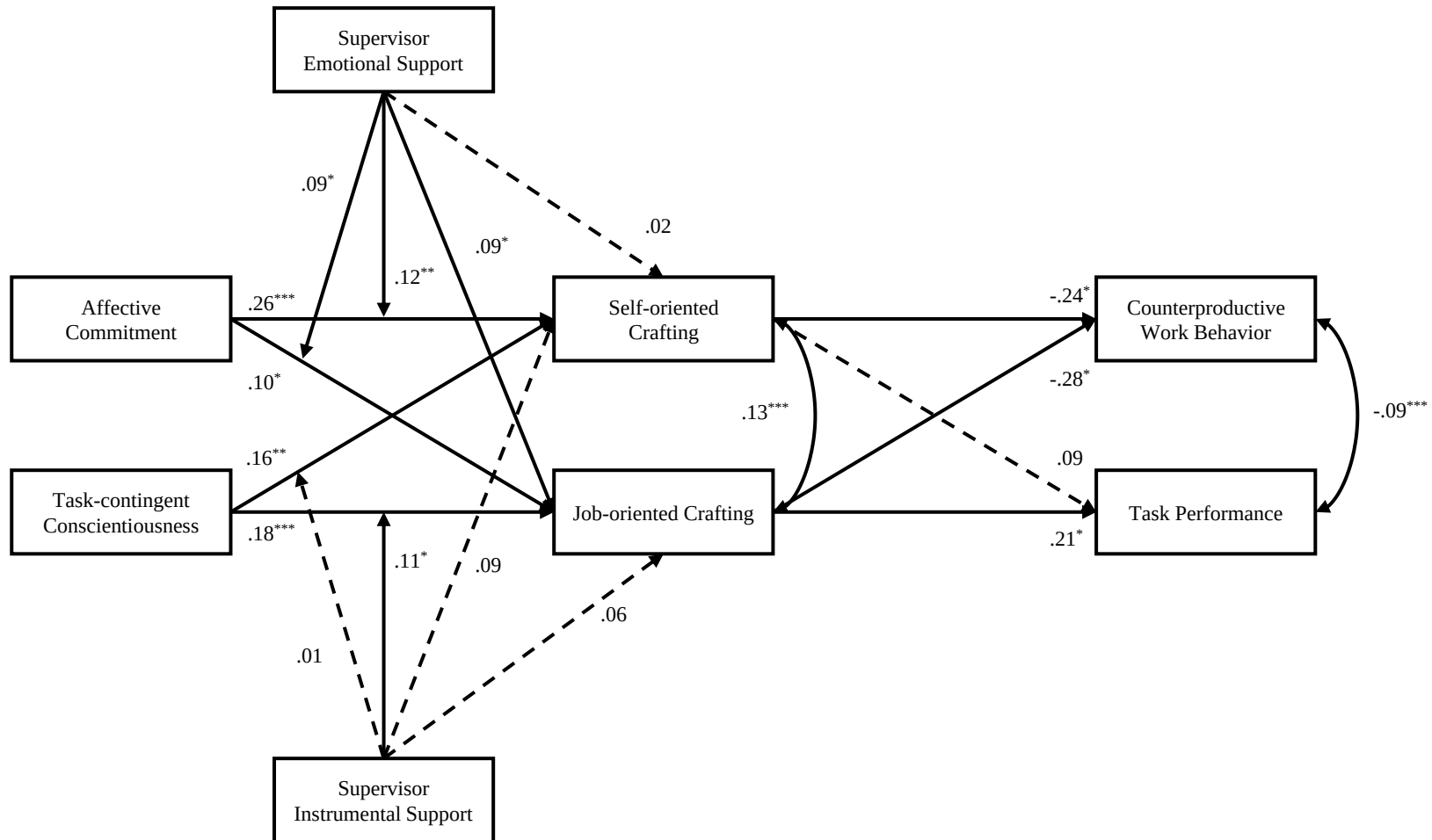
Note. $N = 420$. Solid lines represent significant path coefficients; dashed lines represent nonsignificant results. Covariances between endogenous and exogenous variables were not illustrated for simple presentation. CWB = counterproductive work behavior.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

3.8 Supervisor Support as Boundary Condition

Though the conceptual model of this study uses affective commitment and task-contingent conscientiousness as boundary conditions of job crafting, these variables and supervisor support variables are analytically commensurate. That is, supervisor support variables can also serve as the moderators of the relationships between affective commitment and task-contingent conscientiousness and job crafting. Figure 11 presents this model that switches positions of the predictors and moderators originally illustrated in Figure 6. Affective commitment showed a stronger association with self-oriented crafting ($b = .26, SE = .04, p < .001$) than with job-oriented crafting ($b = .10, SE = .04, p < .05$), and the difference of their effects was significant ($difference = .16, SE = .04, p < .001$). Task-contingent conscientiousness had similar degrees of impact on self-oriented crafting ($b = .16, SE = .05, p < .01$) and job-oriented crafting ($b = .18, SE = .05, p < .001$).

It is important to note that this model functions analytically the same with the model in Figure 6 but makes different arguments. Here, individual factors serve as predictors and supervisor support variables are moderators. Figure 12 and 13 depicted the interaction effects using supervisor support as boundary condition. The figures suggest that when supervisor emotional support was high (+1 SD), affective commitment was more strongly related to self-oriented crafting ($b = .36, SE = .05, p < .001$), and when supervisor instrumental support was high (+1 SD), task-contingent conscientiousness was more strongly related to job-oriented crafting ($b = .27, SE = .07, p < .001$). I will discuss the implications of this supplementary analysis in the discussion section.

Figure 11. Results of hypothesized model using supervisor support as moderator



Note. $N = 420$. Solid lines represent significant path coefficients; dashed lines represent nonsignificant results. Covariances between exogenous variables were not illustrated for simple presentation.

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

Figure 12. Interaction between supervisor emotional support and affective commitment

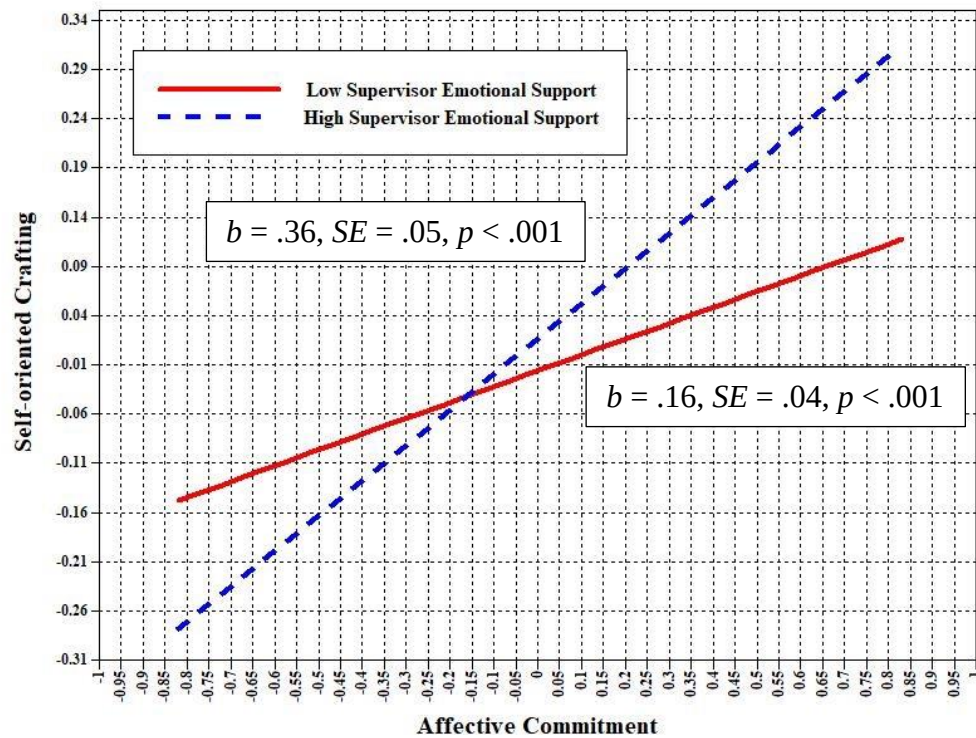
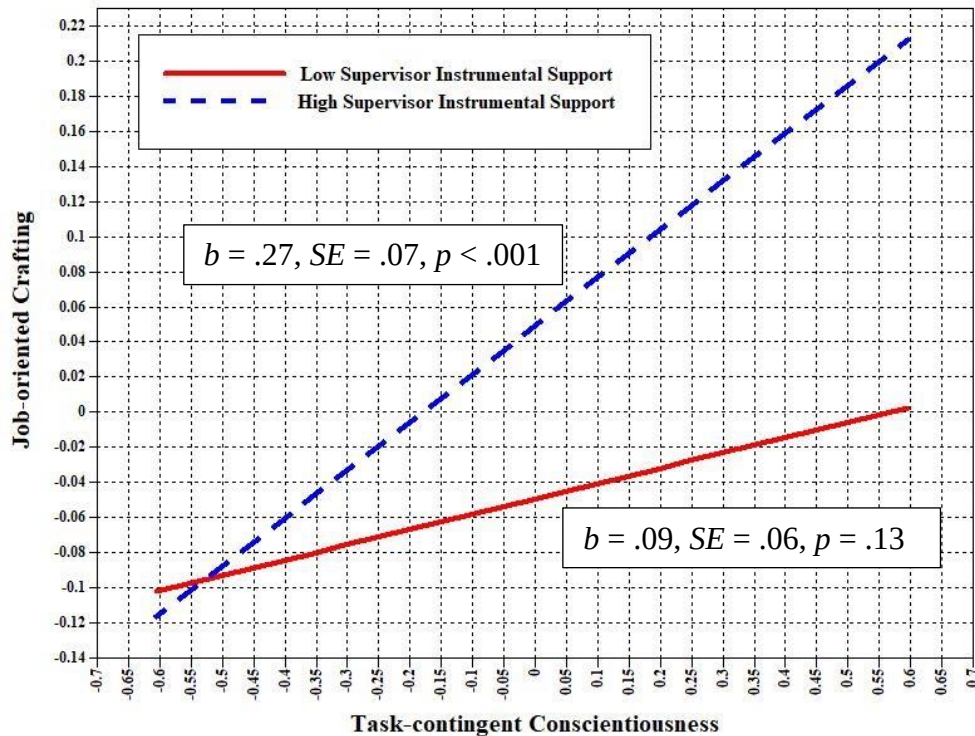


Figure 13. Interaction between task-contingent contingent conscientiousness and supervisor instrumental support



CHAPTER 4 DISCUSSION

Through an extensive review of the literature of job crafting, I contend that prior conceptualization of job crafting emphasized on changes made to the job but paid little attention to changes made to the crafters themselves. Based on the literature of proactivity and person-job fit, I suggest that job crafting has two different targets, the self and the job, each reflecting a unique approach of initiating meaningful changes to the person-job relationship. I thus propose a new framework of self-oriented crafting and job-oriented crafting and explicate their conceptual domains through the theoretical lens of work design, employability, and the IPO model. Furthermore, I conducted three empirical studies that examined the construct validity of self-oriented crafting and job-oriented crafting, and the findings provided initial evidence that self-oriented crafting and job-oriented crafting are two distinct constructs, have differential predictors and outcomes, and function in unique ways through an affective versus an instrumental mechanism.

4.1 Theoretical Implications

This dissertation contributes to the understanding of job crafting in various ways. First, employees crafting their personal characteristics and functioning at work represent a unique approach of job crafting that is different from crafting job characteristics. Prior research did not specify the target of the self in addition to the job in either theory or measurement. The findings in this dissertation research provided converging evidence that self-oriented crafting and job-oriented crafting are empirically different from each other. The results of exploratory and confirmatory factor analysis in Study 1 suggested that there were two underlying factors of job crafting behaviors. In Study 2, the proposed two-factor structure of job crafting was also supported. In addition, self-oriented crafting and job-oriented crafting were found to be

empirically different from networking behavior and informal field-based learning, which identified some employee behaviors that may have conceptual overlaps with self-oriented crafting and job-oriented crafting. Study 2 also provided initial evidence of the discriminant validity of self-oriented crafting and job-oriented crafting: self-oriented crafting was found to be related to CWB but not task performance, while job-oriented crafting was found to be related to task performance but not CWB.

The two aspects of job crafting resonate with the perceived beneficiary model of employee development activity (Maurer et al., 2002). This model aims to answer the question of which type of development activities motivate employees to pursue and why. Development activities refer to workplace learning or development experiences, such as mastering tasks or information, learning new skills, and taking on novel and challenging job tasks, which represent opportunity for growth (Maurer et al., 2002). From a social exchange perspective (Blau, 1964), the theory argues that the perceived beneficiary of development activities plays a role in guiding one's development activities. On the one hand, the intention to engage in development activities will be stronger when employees view themselves as the primary beneficiary because they take into account their personal values; on the other hand, this intention can also be stronger when employees view the organization/supervisor as the primary beneficiary because they weigh up the quality of the exchange relationship (e.g., leader-member exchange, perceived organizational support). Though consideration of either the self or the organization/supervisor contributes to the intention and actions to develop, the two targets represent conceptually distinct approaches and the weighted evaluation of them together influences employee development activities (Maurer et al., 2002). Accordingly, as self-oriented crafting and job-oriented crafting have different targets

of impact, employees may consider who benefits from job crafting and then be motivated to engage in the corresponding development activities.

In addition, given the different nature of self-oriented crafting and job-oriented crafting, it might be possible that the two types of job crafting could interact with each other to impact individual well-being and work outcomes. A recent study by Petrou and Xanthopoulou (2021) provided initial evidence that different types of job crafting could have joint effect on performance outcomes. They found in a three-week diary study that when increasing social job resources was high, decreasing hindering demands was more positively related to other-rated performance, and when increasing structural resources was high, decreasing hindering demands was more positively related to past-referenced performance. As self-oriented crafting and job-oriented crafting aim to solve person-job misfit in different aspects, their joint effect could be more influential on work outcomes than the separate main effect. I tested this idea with post hoc analysis using the data from Study 3 and found that self-oriented crafting and job-oriented crafting had joint effect on PO fit ($b = .31$, $SE = .10$, $p < .01$) but not on other outcome variables. Despite limited evidence found in the cross-sectional data in this study, it is possible that the interaction between self-oriented crafting and job-oriented crafting would take effect over a longer time frame. For example, workers using job-oriented crafting would have strengths in solving concurrent work issues, but if they also engage in self-oriented crafting, then in the long-run, they would be better able to perform work tasks, have higher chances of being promoted, or achieve a stable level of work well-being. As a result, people who engage in both types of job crafting could have a competitive advantage in the long run.

Second, the findings of different moderators of self-oriented crafting and job-oriented crafting engagement added to existing knowledge of when job crafters will initiate change.

Empirical studies that examined the conditions of job crafting engagement were limited. Thun and Bakker (2018) found that the joint effect of empowering leadership and optimism influenced crafting structural resources and challenging demands but not crafting social resources and crafting hinder demands. The idea of examining the interaction of personal and contextual resources was also adopted in this dissertation research. What is different is that Thun and Bakker did not hypothesize that the interactive effect would show differential impact on different types of job crafting, even if their findings suggested so. Similarly, two recent studies, Sheehan et al. (2021) and Zhang et al. (2021), tested the boundary conditions of job crafting but did not argue for differential relationships. Sheehan et al. (2021) tested the interaction between supervisor support and high-performance work practices and its influence on job crafting but included these variables as a general factor instead of different types of job crafting. Zhang et al. (2021) proposed that organizational identity would be a moderator of both the relationship between overqualification and crafting towards strengths and between overqualification and crafting towards interests. They found that the joint effect was only significant on crafting towards strengths but not on crafting towards interests.

Besides, it is to my best knowledge that only two studies examined differential boundary conditions of job crafting. Petrou et al. (2018) and Bindl et al. (2019) both looked into the role of regulatory focus. Petrou et al. (2018) argued that promotion focus would positively moderate the relationship between quality of change communication and job crafting while prevention focus would negatively moderate this relationship. Bindl et al. (2019) found that need for autonomy interacted with promotion focus to influence promotion-oriented task crafting but interacted with prevention focus to influence prevention-oriented task crafting. In addition, they found that need for competence interacted with promotion focus to influence both promotion-oriented skill

crafting and cognitive crafting, but its interaction with prevention focus did not influence prevention-oriented skill crafting and cognitive crafting. These findings suggest that promotion focus is unique to promotion types of job crafting and prevention focus is unique to prevention types of job crafting. This dissertation research came up with a similar conclusion that different types of job crafting have unique relationships with constructs that share closer theoretical links but furthered this knowledge by going into detailed beneficial forms of job and testing differential boundary conditions of job crafting when the target of impact differs.

It was unexpected that the association between supervisor support and job crafting was not significant in the current research, despite their significant correlations at .30s which were similar to or even stronger than the effect size in prior findings (e.g., Sheehan et al., 2021; Shin et al., 2020, Study 2; Wang et al., 2020). It might be possible that the impact of supervisor support on job crafting is transmitted by other mediating factors. Support from supervisors, whether in emotional or instrumental forms, are contextual resources. According to job demands-resources theory (Demerouti et al., 2001), these resources can be translated into employee engagement. Christian et al. (2011) found in their meta-analytical study that leader-member exchange was moderately correlated with work engagement. Thus, it is likely that support from supervisors indirectly influences job crafting through work engagement.

Nevertheless, it is interesting to find that the main effects of affective commitment and task-contingent conscientiousness on self-oriented crafting and job-oriented crafting were significant. More importantly, affective commitment showed a stronger association with self-oriented crafting than with job-oriented crafting. This suggests that self-oriented crafting, compared with job-oriented crafting, may be more likely selected by affectively committed

employees as a crafting strategy, because the shared emotional basis encourages individuals to explore and utilize opportunities for growth in the organization.

Moreover, given the unsupported hypotheses of the main effects of supervisor support *and* the evidence from empirical results of the differential main effects of affective commitment on self-oriented and job-oriented crafting, I deduce from these findings that the process of job crafting could be more of a self-driven phenomenon than of a resource-based activity. The prior represents the motivational perspective of Wrezniewski & Dutton (2001) in contrast with the latter that corresponds to the views of Tims et al. (2012). Wrezniewski and Dutton (2001) focused on the motivational process of job crafting, while Tims et al. (2012) emphasized available resources and demands in the workplace that enable job crafting. Though the two fundamental perspectives of job crafting were believed to be parallel (e.g., Bruning & Campion, 2018; Tims et al., 2021; Zhang & Parker, 2019), the findings in this study suggest that the two fundamental frameworks may attend to different aspects of the job crafting process and would be more powerful in explaining the relationships of job crafting with different types of variables.

Third, the findings of specific job crafting behaviors being associated with specific work outcomes provide new insights into the effectiveness of job crafting. Harju et al. (2021) suggested that job crafting can function as a double-edged sword because they found that approach crafting will not only enrich jobs (i.e., leading to increase in job complexity, defined as learning requirements, decision-making opportunities, and responsibilities; Dallner et al., 2000) but also add to workload. The former influence is motivating while the latter depletes one's personal resources, and individuals would thus be more likely to experience burnout. It is worth noting that the approach crafting in Harju et al.'s (2021) study was measured as an aggregate of three types of job crafting, including increasing structural job resources, increasing social job

resources, and increasing challenging demands. As discussed before, such measure mixes the self and the job as targets of impact. It would be possible that crafting towards different targets would function in unique ways. Specifically, approach crafting towards the self could be more strongly related to increase in job complexity because individuals try to develop their professional skills, expand social connections, and understand work in meaningful ways. These changes will make job crafters find their jobs more challenging and meaningful and thus become motivated to work. By contrast, approach crafting towards the job could be more strongly related to changes in workload, as individuals may ask for more tasks, apply new ways to perform work tasks, and spend time on looking for help from others in the workplace. All these actions may compete for available personal resources and thus increase the likelihood of burnout.

In addition, it remains unclear why empirical evidence stands in sharp contrast with the theoretical value of avoidance job crafting. Avoidance job crafting, usually operationalized as decreasing hindering demands, was found to be bad for work outcomes (Rudolph et al., 2017), such as self-rated performance, contextual performance, job strain, and turnover intentions. However, avoidance crafting was proposed as a parallel crafting strategy together with approach crafting to improve one's well-being and functioning at work. The idea of differentiating different targets of impact could be used here to explain why avoidance crafting functions in detrimental ways. The rationale behind avoidance crafting being beneficial is that individuals withdraw themselves from work to recover so that they could go back to work replenished. This suggests that these avoidance crafters make changes only to themselves, such as putting a limit on the amount of working time, reducing contact with people they find disturbing, and changing how they view hindering job demands. However, avoidance crafting was mostly measured as reducing job demands, such as decreasing the number of work tasks, which in fact changes the

job as target. It thus reflects a withdrawal tendency that contradicts the motivating role of job crafting (Zhang & Parker, 2019). Therefore, if researchers separate different targets of impact of avoidance crafting, the beneficial and dysfunctional roles of avoidance crafting might be clarified.

4.2 Practical Implications

The research findings in this dissertation offer recommendations for management practices. First, job crafting is more than just an alternative work design approach but can also be a solution to employee learning and development. This research demonstrated that self-oriented crafting, which has been largely omitted in the understanding of the utility of job crafting, is different from job-oriented crafting as it can serve as a useful approach of employee development. Following Ford et al.'s (2018) call for more attention to informal learning in organizations, I recommend organizations go beyond traditional forms of training and development and encourage individuals to exert personal effort to self-paced learning and development that is customized to their specific needs. It is important to note that self-oriented crafting can bring to employees more than experiences of informal learning, which is defined as intentional, unstructured, and incidental on-the-job learning (Marsick et al., 1999). Self-oriented crafting attends to a wider range of functions, including human capital development, accumulation of social resources, and identity development. These utilities of self-oriented crafting correspond to Dachner et al.'s (2021) suggestion of increasing employee-driven effort in employee development in management practices.

Second, before providing support to employees, managers are recommended to consider what goals are expected to achieve and which employees are going to receive the support. If the goal is to encourage employee self-development, emotional support would be more prominent to

employees, especially when they are affectively committed to the organization. This is because they recognize with organizational values and are willing to invest themselves in the long-term growth in the organization. If the goal is to deal with immediate work challenges, problems, and novel situations at hands, instrumental support would be more helpful as it provides concrete advice, guidance, and feedback on what to do and how to do one's job. As a result, individuals can quickly apply such resources to daily work activities and improve task performance via job-oriented crafting. This is especially the case for people with high task-contingent conscientiousness because they are quite responsive to situational cues (e.g., supervisor instrumental support) and can elevate their personal resources to make essential changes to work tasks.

Third, training interventions that aim to equip employees with job crafting skills are recommended to raise employee trainees' awareness of differential outcomes of job crafting. The supplementary analysis of this research found that self-oriented crafting had unique impact on person-organization fit, job-oriented crafting had unique impact on task performance, and both types of job crafting would influence person-job fit in terms of needs-supplies fit. This is important because a specific training objective is critical to the effectiveness of training and transfer (Blume et al., 2010). In addition, short-term training goals serve long-term and high-level career goals that guide one's effort in learning and transfer (Blume et al., 2019). Understanding the unique link between specific job crafting behaviors and specific outcomes will help employees focus their learning effort on learning objectives and practical needs, thus improving transfer of training in daily work.

4.3 Limitations and Future Research

This research is limited in several ways. First, answers to questionnaire items were all based on self-report responses, making common method variance (CMV) a confounding factor of observed relationships (Podsakoff et al., 2003). This concern is to some extent alleviated given the nature of the three empirical studies included in this dissertation research. Study 1 focused on exploring the underlying factors of job crafting behaviors; the purpose of Study 2 and Study 3 tried to find evidence of differential relationships, and CMV would confound with all relationships of comparison instead of enlarging some of them; Study 3 separated the measurement occasions with an interval of about three weeks. All of these practices may reduce some of the influence of CMV to the study findings. But still, future research is recommended to gain access to multi-source data, such as supervisor-rated work outcomes and archival records of performance.

Second, due to practical limitations, Study 3 adopted a time-lagged design that only included two measurement occasions, which was not a true longitudinal design, making it difficult to infer causal relationship. Ideally, supervisor support, affective commitment, and task-contingent conscientiousness should be assessed at a time point prior to the measurement of job crafting. Instead, participants were asked to evaluate their general level of affective commitment and provide an overall evaluation of perceived supervisor support, but they were asked to rate the frequency of job crafting engagement over the past few weeks. In addition, task-contingent conscientiousness represents a relatively stable between-person difference characteristic (Huang & Ryan, 2011; Minbashian et al., 2010). Therefore, concerns over temporal precedence might be reduced, but still, future research is highly recommended to adopt a more rigorous design that separates predictors and outcomes that are measured at different time points, or even use

repeated measures of all study variables so that potential dynamic relationships between study variables can be empirically tested.

Third, this research focused on approach forms of job crafting because they were found to be mostly beneficial but did not theorize how different targets of impact may categorize avoidance forms of job crafting into more detailed crafting strategies. As discussed in earlier sections, crafting towards the self versus crafting towards the job in avoidance forms may help explain when avoidance crafting is beneficial versus detrimental. As the approach and avoidance framework has become increasingly popular in job crafting research, future studies can examine if self-oriented avoidance crafting and job-oriented avoidance crafting represent distinct crafting strategies that have unique relationships with theoretically relevant constructs.

Given the findings in this research, there are some other interesting directions future research can explore. First, it can be learned from the attention to self-oriented crafting in contrast with job-oriented crafting that other targets of impact of job crafting are worth exploring. Existing research has investigated crafting other targets, such as crafting leisure activities (Berg, Grant, & Johnson, 2010), behaviors at home (Demerouti et al., 2020), and work-life balance (Sturges, 2012). These non-work domain crafting behaviors represent one's effort in pursuing optimal functioning (de Bloom et al., 2020), which maximizes feeling and performance. From the perspective of psychological needs, de Bloom et al. (2020) suggested the target of job crafting can include many forms that address one's unfilled needs rooted in different identities. Hence, job crafting, contingent on what roles the job incumbent adopts, targets different aspects and functions in unique ways. For example, supervisors can craft towards themselves and their job contents when taking the role of an employee of the organization, but they can also craft their leadership when taking the role of a leader of work teams. It is thus interesting to investigate how

supervisors improve leadership skills through self-initiated actions and how these behaviors will lead to leadership, performance, and well-being outcomes.

Second, research can examine if self-oriented crafting and job-oriented crafting will display different change patterns over time. Job crafting is not a one-time, temporary effort (Bruning & Campion, 2018). Job crafters can constantly monitor how they perform in job crafting and then maintain their crafting effort in order to ensure crafting results (Wang et al., 2022). This within-person change of job crafting levels over a period of time reflects the process of regulating one's job crafting effort (Wang et al., 2022). The current research suggests that whereas job-oriented crafting is instrumental and attends to immediate tasks at hands, self-oriented crafting cultivates human capital, social resources, and career identity that takes longer time to effect. Because of this, individuals who try to invest continuous effort in job crafting may present changes in job-oriented crafting within a relatively short period, but changes in self-oriented crafting may take a longer time. The different nature in change patterns may have different impact on crafting and work outcomes.

Third, research can investigate if self-oriented crafting and job-oriented crafting may influence coworker job crafting effort in different ways. In many situations, individuals would work in a team context, and their job crafting behaviors, though sometimes unobservable to other people, would be noticed when the level of job crafting increases (Dierdorff & Jensen, 2018). As a result, coworkers may imitate job crafting behaviors or even craft together as a team (Leana et al., 2009; Tims et al., 2013). What could be more interesting is that as job crafting can be contagious, an unhealthy competitive climate might be created, such as rivalry and social comparison (Swab & Johnson, 2018). This is possible because proactive behaviors may be interpreted in negative ways by other workers who could doubt the intentions behind acting

proactively at work (Grant et al., 2009; Sun et al., 2021; Zhang et al., 2021). Wrzesniewski and Dutton (2001) noted that it is likely that other people's work may be affected by the focal employee's job crafting behaviors. Indeed, trait competitiveness, an individual difference characteristic of enjoying interpersonal competition, aspiring to win, and being willing to outperform others (Houston et al., 2002; Spence & Helmreich, 1983), can activate one's willingness to follow others' proactivity at work and craft the job when they observe other people developing themselves (e.g., through self-oriented crafting) and actively solving difficulties (e.g., through job-oriented crafting). This does not necessarily mean a good thing, as competitive climate was also found to lead to stress and negatively impact task performance (Fletcher et al., 2008). It remains unknown when the focal person's crafting targets differ, how self-oriented crafting versus job-oriented crafting would impact other people's crafting behaviors and whether the competitive climate would become healthy or toxic. Future research can combine job crafting with competitive work climate in the social context at work to investigate this topic.

4.4 Conclusion

This dissertation addresses the possibility of the individual self being another target of impact of job crafting, which has been largely omitted in the job crafting literature. Through three empirical studies, this dissertation research found supportive evidence of the proposed taxonomy of self-oriented crafting and job-oriented crafting. Moreover, the empirical findings of this research suggested that the two types of job crafting are distinct from each other and function in different ways. Theoretical contributions and practical implications have been discussed in prior sections, and scholars are recommended to further explore new directions of future research on job crafting given the two unique forms of job crafting.

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