

Job and Career Crafting to Fulfill Individual Career Pathways

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In today's tumultuous and rapidly changing world of work, individuals tend to change jobs and employers much more often than in the past. Some of these individuals change jobs voluntarily, for reasons such as opportunities for advancement, better compensation, less expected job stress, or to deal with reduced job satisfaction (Griffeth, Hom, & Gaertner, 2000). However, others may have involuntarily lost their job due to organizational restructuring or changes in employment regulations (Gowan, 2014). Overall, it is clear that careers have become more flexible and dynamic, which is illustrated by dominant perspectives in career research on boundaryless (Arthur, Khapova, & Wilderom, 2005) and protean (Hall, 2004) careers, as well as popular topics such as employability and career mobility (Akkermans & Kubasch, 2017). This generally increased mobility has led to questions about whether it makes sense to invest in employees (De Cuyper & De Witte, 2011) and about how to retain people who are important to the organization (Lang, Kern, & Zapf, 2016). Such questions are important to consider while also realizing that a large part of the working population may not be constantly moving or are not facing job insecurity due to their permanent position in an organization. However, also for them, these questions about deliberately managing their personal development and the overall enjoyment in their jobs are relevant to consider. Following from this, this chapter focuses on how individuals

* Maria Tims and Jos Akkermans, *Job and Career Crafting to Fulfill Individual Career Pathways* In: *Career Pathways*. Edited by: Jerry W. Hedge and Gary W. Carter, Oxford University Press (2020). © Oxford University Press.

can proactively craft fulfilling careers by shaping both their individual jobs and the series of jobs or roles that comprise their career journeys. Specifically, our aim in this chapter is to illustrate how being proactive may allow individuals to achieve a better job for themselves and consequently to better navigate their careers, whether they stay in the same organization or enter a new organization. Next, we define proactive behavior that forms the basis of job and career crafting.

Proactive Behavior

Individuals are considered proactive when they take initiative that challenges existing routines or procedures to improve the current situation or to create a new situation (Crant, 2000). In the proactivity literature, a distinction has been made in relation to the target of proactive behavior (Belschak & Den Hartog, 2010): Proactive behaviors can be targeted toward oneself (pro-self), the team or department (prosocial), and/or the organization (pro-organizational). In this chapter, we focus on proactive behaviors targeted toward one's own goals, hence pro-self behaviors, that are aimed to achieve a better job and ultimately to create a fulfilling career for oneself.

Understanding one's job tasks constitutes an aspect of job design, which may be defined as "the content of one's work tasks, activities, relationships, and responsibilities" (Parker, 2014, p. 662). Recent perspectives on job design have spurred research to identify work characteristics that may activate proactive behaviors. For example, job characteristics such as job control, social support, and challenging job demands may promote proactive work behaviors (Ohly & Fritz, 2010; Parker, Bindl, & Strauss, 2010; Tornau & Frese, 2013) as well as a climate for initiative (Raub & Liao, 2012). Personal dispositions such as proactive personality and role-breadth self-efficacy may interact with specific job design characteristics (e.g., access to resources and

strategy-related information) to predict proactive behaviors at work (cf. Fuller, Marler, & Hester, 2006).

The proactive perspective on job design also features a shift from predominantly considering job design from a top-down perspective to also include bottom-up initiatives, which are proactive behaviors of employees who initiate changes in their own job design, denoted as *job crafting* (Wrzesniewski & Dutton, 2001). Thus, job crafting represents a different focus on employee proactivity because the behavior involves changing one's own job design instead of changing the team or organization (see also Parker, 2014).

Job Crafting and Work-Related Outcomes

Job crafting refers to self-starting behaviors that employees engage in to optimize their job according to their own knowledge, skills, abilities, and preferences. These behaviors involve changing specific aspects of work on their own initiative without direct involvement of others (Tims, Bakker, & Derks, 2012). It is theorized that individuals engage in job crafting to create a better alignment between the job and their individual characteristics, thereby ultimately enhancing person–job fit (Tims, Derks, & Bakker, 2016). For example, some employees work best under strict deadlines, whereas others have the need for clear guidance from a supervisor. Similarly, some employees may value developmental or challenging job demands, whereas others value clearly defined tasks. In other words, individuals have different personalities, motivations, and circumstances that can create the need to adapt the job accordingly. Because it is difficult for managers to design a job that exactly fits each individual's preferences, skills, and talents, job crafting may be an important and complementary strategy to achieve a job that fits the individual (Wrzesniewski & Dutton, 2001). It is important to note that job crafting can have many different forms and that the changes employees make can range from small to large, and

even the smallest changes can have a large impact on the individual's experience of work (Wrzesniewski, 2003).

Theoretical Perspectives on Job Crafting

Two dominant perspectives on job crafting exist in the scientific literature and are summarized in Table 10.1. First, Wrzesniewski and Dutton (2001) argued that individuals can physically or cognitively change their task and relational boundaries. These types of job crafting can be divided into three aspects, referring to task, relational, and cognitive crafting. Task crafting refers to self-initiated changes in the number, scope, or type of job tasks, whereas relational crafting involves changing the quality and/or quantity of interactions with others at work. For example, a job crafter may take on additional tasks because they find them enjoyable and challenging and/or may engage in less interaction with persons who distract their attention from work tasks by closing one's office door or avoiding them. Cognitive crafting is about changing the way one approaches or views the job. As an example of this form of job crafting, Wrzesniewski and Dutton described how a cook reframes the job from preparing meals to being a food artist. From this job crafting perspective, the central outcomes of job crafting focus on how it can help to change one's work identity, self-image, and the meaningfulness of work (Berg, Wrzesniewski, & Dutton, 2010; Mattarelli & Tagliaventi, 2015; Wrzesniewski, LoBuglio, Dutton, & Berg, 2013).

Table 10.1

Overview of the Two Job Crafting Perspectives

Perspective	Crafting Form	Definition
Wrzesniewski and Dutton (2001)	Task crafting	Changing the number or scope of job tasks
	Relational crafting	Changing the number or quality of work relationships
	Cognitive crafting	Changing the way one thinks about work
Tims, Bakker, and Derks (2012)	Increasing structural job resources	Increasing the level of autonomy, opportunities for development, and variety
	Increasing social job resources	Increasing the level of social support, feedback, and coaching
	Increasing challenging job demands	Increasing the level of challenging aspects of work (e.g., new projects)
	Decreasing hindering job demands	Reducing hindering aspects of work (e.g., cognitive or emotional demands)

The second perspective, and the one that is central in this chapter, approaches job crafting from a job design perspective. Tims and Bakker (2010) argued that in order to frame job crafting as a bottom-up job redesign activity, it needs to reflect important features of job design theories. Subsequently, Tims and colleagues (Tims & Bakker, 2010; Tims et al., 2012) introduced job crafting using the principles of the job demands–resources (JD-R) model (Bakker & Demerouti, 2007, 2017). The JD-R model categorizes job characteristics as job demands or job resources that enable organizing specific job characteristics into either of these broad categories. Job demands include those aspects of work that require physical or psychological effort from the

employee and can be associated with negative health outcomes if they are too high over a prolonged time (e.g., conflicting information about tasks or a too high workload). Job resources refer to those aspects of work that help employees deal with hindering job demands and may also function as opportunities to develop oneself (e.g., having decision-making autonomy or receiving adequate feedback; Bakker & Demerouti, 2007). Applying this model to job crafting, Tims and colleagues (2012) distinguished four forms of crafting job demands and job resources: (1) increasing structural job resources, (2) increasing social job resources, (3) increasing challenging job demands, and (4) decreasing hindering job demands.

The first type of job crafting is based on changing job resources that have an impact on the way the job is performed and on the skills and responsibilities needed to perform the job tasks. Specifically, *increasing structural job resources* focuses on employees actively increasing their levels of autonomy, task variety, and opportunities for development. The second type of job crafting, *increasing social job resources*, refers to self-initiated activities to gain access to valued social information sources, such as feedback from a supervisor or colleagues and supervisory coaching. Thus, although both of these types of job crafting refer to actively trying to increase job resources, they can be distinguished on the basis of whether they influence the job in a structural way (i.e., structural job resources) or in a social way (i.e., social job resources).

The third and fourth forms of job crafting refer to changing the level of job demands. According to LePine, Podsakoff, and LePine (2005), not all job demands are associated with negative well-being outcomes, which requires that a distinction should be made among job demands that are experienced as challenge demands and job demands that are experienced as hindrance demands. That is, although both challenge and hindrance demands require the employee's physical or psychological effort to deal with these demands, challenge demands are

associated with learning and achievement, whereas hindrance demands are associated with strain (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Based on this distinction, Tims et al. (2012) proposed that individuals can actively create those learning experiences by *increasing challenging job demands* (e.g., starting a new project) and *decreasing hindering job demands* (e.g., decreasing contact with emotionally demanding persons).

Empirical Findings on Job Crafting

According to recent reviews (e.g., Wang, Demerouti, & Bakker, 2016) and a meta-analysis (Rudolph, Katz, Lavigne, & Zacher, 2017), the second perspective on job crafting—based on the JD-R model—has generated much empirical research. Studies following this job crafting perspective have reported positive relationships between job crafting and important organizational and individual outcomes. For example, at the organizational level, job crafting in the form of increasing structural and social job resources relates to better job performance (Gordon, Demerouti, LeBlanc, & Bipp, 2015; Weseler & Niessen, 2016) and a better adaptation to organizational change (Petrou, Demerouti, & Schaufeli, 2018). At the individual level, those who craft their job resources and challenging job demands report higher levels of work engagement, which reflects a strong positive attitude toward one's work (Harju, Hakanen, & Schaufeli, 2016; Kooij, Tims, & Akkermans, 2017). Furthermore, in line with theoretical expectations, job crafting is also associated with better person–job fit (Lu, Wang, Lu, Du, & Bakker, 2014; Tims et al., 2016).

Although increasing job resources and challenging job demands were associated with these positive outcomes, the opposite or no relationship was found for decreasing hindering demands and these outcomes. In addition, although it is expected that decreasing hindering job demands helps create a better job, research does not support positive relationships. In an effort to

better understand these unexpected outcomes of decreasing hindering job demands (also called reduction-oriented job crafting), Demerouti and Peeters (2018) divide this type of job crafting into two more specific forms. In line with existing research, they refer to proactive efforts to minimize demands to make a job less strenuous and they add a second form referring to proactive efforts to optimize job demands, which refers to making the job simpler and the work process more efficient. As expected, optimizing demands related positively to work engagement, whereas minimizing demands was unrelated to work engagement. In other words, these authors argue that optimizing demands allows the individual to resolve an issue that may result in increased engagement, whereas minimizing demands may result in a less satisfying and challenging job.

Job Crafting and Career-Related Outcomes

As demonstrated in the previous section, there is a growing literature that links job crafting behaviors to performance, enhanced person–job fit, and job-related well-being. Although job crafting research has primarily focused on these areas, we argue that it is also apparent that job crafting relates to enhanced person–career fit (De Vos, Van der Heijden, & Akkermans, 2018). One example of this link that has recently been explored in scientific research is that job crafting may enhance individuals' employability. Investing in one's personal development by increasing work responsibilities and access to learning opportunities should lead to a greater value in the marketplace. Research on job crafting and employability has thus far mostly focused on *perceived employability*, which is one of the dominant streams of research in the employability domain (for a comprehensive overview, see Forrier, Verbruggen, & De Cuyper, 2015). Perceived employability reflects the individual's perception of their chances to obtain and maintain employment (Vanhercke, De Cuyper, Peeters, & De Witte, 2014). To become or remain

employable, it is important that employees continuously learn new skills, use their capacities, and ask colleagues and supervisors for advice and feedback (Tims et al., 2012; Van der Heijden, 2002). The resources that are gained by crafting structural and social job resources and by challenging job demands may allow individuals to develop skills and relationships that are important for employability (Van Emmerik, Schreurs, De Cuyper, Jawahar, & Peeters, 2012). To illustrate, the experience of leading a new project (i.e., increasing challenging job demands) may be transferable to other organizations or may internally signal that one is ready for a next step, thereby enhancing one's employability perceptions. In contrast to proactively increasing job resources and challenging job demands, employees who proactively lower their hindrances at work may signal that their qualities are not in line with the demands of their job and need to make the job more manageable for themselves. It is therefore less likely that this type of job crafting is related to employability.

Several studies provide support for this assumed positive link between increasing job resources and increasing challenging job demands and employability (Akkermans & Tims, 2017; Brenninkmeijer & Hekkert-Koning, 2015; Plomp, Tims, Khapova, Jansen, & Bakker, 2018; Tims et al., 2012). A recent study by Lysova, Jansen, Khapova, Plomp, and Tims (2018) supported the specific relationship between crafting opportunities for development (which they labeled proactive professional development) and employability in two samples. Furthermore, as expected, decreasing hindering job demands was negatively associated (Brenninkmeijer & Hekkert-Koning, 2015) or not associated with employability (Plomp et al., 2018). Overall, these empirical findings on the relationship between job crafting and employability demonstrate that proactively expanding one's job resources and challenging job demands relates to perceptions of

employability, thereby providing early evidence that job crafting is indeed linked to career outcomes (cf. Akkermans & Tims, 2017).

Career Crafting: A Conceptualization

In the previous sections, we first provided theoretical and empirical evidence relating job crafting to work-related outcomes. Then, we showed that it is likely also related to career-related outcomes, at least in the form of employability. Next, we argue that there may be specific crafting behaviors that relate directly to proactively shaping one's career. That is, we make a case for the notion of *career crafting* and provide an initial definition, as well as some empirical findings based on a newly developed measurement instrument of career crafting. We start by discussing literature on career competencies and career self-management, which, together with job crafting, form the basis of our conceptualization of career crafting behaviors.

Career Competencies and Career Self-Management

In line with the previously portrayed trend of shifting perspectives from top-down to bottom-up job design that emphasizes the role of individual proactivity at work, career research has also focused on individual agency and ownership in recent years (Akkermans & Kubasch, 2017).

Whereas career paths were traditionally considered to be relatively predictable and linear, they have become increasingly complex and dynamic, meaning that individuals have to take charge to be successful in their careers (Arthur et al., 2005; De Vos & Soens, 2008). In other words, people need to *craft* their careers (cf. Akkermans & Tims, 2017; De Vos, Akkermans, & Van der Heijden, in press). To ensure long-term sustainability of their career development, it is crucial that individuals strive to achieve dynamic person-career fit over time and within their relevant contexts (e.g., their employing organization; De Vos et al., 2018). In light of these developments,

career research has provided a rich knowledge base about the *competencies* that are required to successfully navigate one's career, as well as the proactive *behaviors* needed for doing so.

Career Competencies

Based on the boundaryless career perspective—which emphasizes that careers go beyond the boundary of single employment settings and highlights the importance of flexibility and mobility (Arthur & Rousseau, 1996)—several scholars have examined the so-called “ways of knowing,” or career capital, as types of career competencies. For example, Eby, Butts, and Lockwood (2003) showed that “knowing why,” “knowing whom,” and “knowing how” career competencies can contribute to career success. Similarly, based on the protean career perspective—which focuses on individual agency and psychological success through being values-driven and self-directed (Briscoe & Hall, 2006)—scholars have argued that career meta-competencies are key to successful career development. As an illustration, Hall (1996) argued that self-awareness and adaptability are crucial competencies that allow individuals to “learn how to learn.” A third stream of literature on career competencies departs from a human capital perspective and states that career competencies are important over and above work-related competencies and learning-related competencies (Kuijpers, Schyns, & Scheerens, 2006). Empirical studies have shown that career competencies related to reflection, communication, and planning are important foundations of achieving career success.

In an integration of the existing literature on career competencies, Akkermans, Brenninkmeijer, Huibers, and Blonk (2013) presented a new framework of career competencies, characterizing career competencies as knowledge, skills, and abilities central to career development that can be developed by the individual. As such, career competencies form an important career resource that individuals can acquire to help them develop their career

(Akkermans, Paradniké, Van der Heijden, & De Vos, 2018). This framework of career competencies focuses on three categories of career competencies. *Reflective career competencies* refer to creating a long-term awareness of one's motivation and skills and to matching these reflections to one's career. The two specific career competencies in this dimension are reflection on motivation, which means reflecting on values and motivations with regard to one's career, and reflection on qualities, which refers to reflecting on strengths, shortcomings, and skills. *Communicative career competencies* focus on being able to communicate with others who are relevant for one's career. The two career competencies in this dimension are networking, which means having a solid awareness of one's network as well as being able to expand it for career-related purposes, and self-profiling, which is about being able to present one's competencies to the internal and external labor market. *Behavioral career competencies* refer to the ability to proactively explore and control one's career path. The two career competencies here are work exploration, which refers to actively exploring opportunities in the internal and external labor market, and career control, which focuses on being able to influence learning and work processes by setting goals and striving to fulfill them.

Studies using this integrative framework have shown that personal characteristics, such as proactive personality (Plomp et al., 2016) and core self-evaluations (Tims & Akkermans, 2017), are positively related to career competencies and to proactive behaviors such as job crafting (Akkermans & Tims, 2017). Furthermore, these career competencies can help individuals enhance career-related outcomes such as employability and learning (Blokker, Akkermans, Tims, Jansen, & Khapova, 2019; Preenen, Verbiest, Van Vianen, & Van Wijk, 2015), work-related outcomes such as job satisfaction (Plomp et al., 2016), and work engagement (Akkermans et al., 2013).

Career Self-Management

Whereas the literature on career competencies focuses on “being able” to develop one’s career, research on career self-management has focused on actual proactive behaviors to develop one’s career. King (2001, 2004) argued that career self-management is a dynamic process that involves self-initiated career-related behaviors that can be divided into three groups. First, *positioning behaviors* are about achieving career success through contacts, skills, and experience. Second, *influence behaviors* focus on active attempts to influence the decisions of “gatekeepers” (e.g., employers) to reach desired outcomes. Third, *boundary management* is about actively managing the balance between work and nonwork domains. Engaging in these proactive career behaviors should allow individuals to achieve life and career success (King, 2004). These career self-management behaviors have been empirically linked to, for example, employability (Clarke, 2008), reemployment quality (Zikic & Klehe, 2006), and psychological contract fulfillment (Sturges, Conway, Guest, & Liefoghe, 2005).

In reviewing the literature on career self-management, De Vos, De Clippeleer, and Dewilde (2009) concluded that there are many different names, types, and characterizations of proactive career behaviors. Following the review, these authors integrated these different perspectives, which resulted in two main dimensions of career self-management: a *cognitive* component and a *behavioral* component. The cognitive component primarily deals with actively developing an awareness and deeper insights of one’s career aspirations, whereas the behavioral component focuses on initiating behaviors to manage one’s career. Examples of the former are goal development and formulating plans, and examples of the latter are networking and creating opportunities. In line with King (2004), performing these proactive career behaviors is assumed to lead to favorable career outcomes, such as employability and career success (De Vos, De

Hauw, & Van der Heijden, 2011). Furthermore, scholars have expanded research on career self-management by integrating it into new theory building (Lent & Brown, 2013) and measurement instruments (Hirschi, Freund, & Herrmann, 2014).

Toward a Conceptualization of Career Crafting

The literatures on job crafting, career competencies, and career self-management have mostly developed in isolation. Although the constructs have been linked in empirical research (e.g., job crafting and career competencies [Akkermans & Tims, 2017] and career competencies and career self-management [De Vos et al., 2009]), no clear conceptual integration has thus far been attempted. However, we argue that it makes sense to integrate these concepts into what we refer to as *career crafting*. The reason for this is that although all three literatures make important contributions to a better understanding of proactive career development, they all have a limited scope, and career research would benefit from adding the notion of career crafting. First, job crafting research sheds more light on proactive behaviors that are required of individuals in the contemporary world of work. Yet, its primary focus is on changing elements of one's current job, not the career in general. Second, career competency research enhances our understanding of knowledge, skills, and abilities that can help craft a career but do not represent the actual behaviors required to do so. Finally, career self-management is about proactive behaviors in career management, yet it has a somewhat narrow scope due to its focus on specific and targeted behaviors (e.g., keeping one's resume up to date and talking to senior management) rather than more general proactive career-related behavior and thus could benefit from existing literature on job crafting and career competencies to broaden the scope and better understand career crafting.

Interestingly, there are clear conceptual links between the three concepts. All three focus on proactivity and agency as a core means of achieving work and career success. In addition, all

three are, in essence, about enhancing person–job and/or person–career fit. Based on the previous elaborations, and the conceptual similarities of the three concepts, we define career crafting as proactive behaviors that individuals perform to self-manage their career and that are aimed at attaining optimal person–career fit.

Furthermore, we argue that career crafting consists of two dimensions. In line with De Vos et al. (2009), career crafting can be considered to consist of a cognitive and a behavioral component. Interestingly, from the perspective of job crafting from Wrzesniewski and Dutton (2001), job crafting also consists of a cognitive component and a behavioral component. A similar distinction is evident in the integrative framework of career competencies by Akkermans et al. (2013), in which reflective career competencies would signify a cognitive component, and communicative and behavioral career competencies are more behaviorally oriented. Thus, when integrating the knowledge on job crafting, career competencies, and career self-management, we argue that career crafting behaviors will consist of two primary dimensions: *proactive career reflection* and *proactive career construction* (Table 10.2).

Career Crafting: A Measurement Instrument

Based on our conceptualization of career crafting, we developed a new measurement instrument—the Career Crafting Survey (CCS)—that aims to capture proactive career reflection and proactive career construction. Next, we performed three empirical studies to examine the reliability and validity of the CCS.

Table 10.2

Career Competencies, Career Self-Management, and Job Crafting as Foundation of Career Crafting

Construct	Key Focus	Key Dimensions
Job crafting	Proactive behaviors aimed at increasing person–job fit	Increasing structural resources Increasing social resources Increasing challenging demands Reducing hindering demands
Career competencies	Competencies that enable individuals to enhance person–career fit	Reflective competencies Communicative competencies Behavioral competencies
Career self-management	Proactive behaviors aimed at managing one’s career	Cognitive Behavioral
Career crafting	Proactive behaviors aimed at attaining optimal person–career fit	Proactive career reflection Proactive career construction

Study 1: Scale Development

Based on a careful review of the literature on job crafting, career competencies, and career self-management, we aimed to formulate items for proactive career reflection and proactive career construction. Using the existing items of the other three constructs as a starting point, we formulated items that would capture both dimensions. The second author of this chapter created the initial item set, after which the first author checked accuracy and completeness of these

items. After discussing the items and rewriting items that were unclear, the CCS consisted of an initial overinclusive set of 24 items related to proactive reflection (e.g., on motivations and qualities) and construction (e.g., networking and setting goals). The items were measured on a 6-point Likert scale ranging from 1 (never) to 6 (always). An example item of proactive career reflection was “I create an overview of my talents and competencies”; an example item of proactive career construction was “I set goals for where I want to be one year from now.”

We ran an exploratory factor analysis (EFA) to examine the factor structure of the 24-item version of the CCS. Based on the results of the EFA, we aimed to reduce the item set in order to construct a survey that would be kept as short as possible while still accurately capturing both career crafting dimensions. Detailed results about the sample and the EFAs can be found in the Appendix. We ended up with a 10-item version of the CCS, with 5 items for each factor. The reliability of these two factors was good (proactive career reflection, $\alpha = .86$; proactive career construction, $\alpha = .85$).

Study 2: Scale Validation

We conducted a second study to examine how the CCS related to the constructs on which it was based (i.e., career competencies, job crafting, and career self-management). Career crafting was measured with the 10-item version of the CCS as discussed previously. Career competencies were measured with the Career Competencies Questionnaire (Akkermans et al., 2013), which consisted of 21 items measured on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). Job crafting was measured with the Job Crafting Scale (Tims et al., 2012), which consisted of 21 items measured on a 5-point Likert scale ranging from 1 (never) to 5 (always). Career self-management was assessed with the career self-management survey from Sturges et al. (2005). For validation purposes, we also included a questionnaire on perceived

employability (De Cuyper & De Witte, 2010). Both were measured on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree).

We ran confirmatory factor analyses (CFAs) to test factorial validity and examine whether the two-factor model of the CCS could be replicated in this data set. We also examined discriminant validity by testing whether career crafting was a different variable compared with the ones on which it was based (i.e., job crafting, career competencies, and career self-management). Detailed results can be found in the Appendix. Overall, the results provided support for our expectations, replicating that career crafting is indeed a two-factor variable (factorial validity; note that we dropped two items based on the CFAs) that is reliable (proactive career reflection, $\alpha = .82$; proactive career construction, $\alpha = .84$) and that is distinct from the other three variables (discriminant validity). Table 10.3 shows the final set of items.

Study 3: Incremental Validity

Finally, we tested in a third sample whether career crafting adds variance in the prediction of perceived employability over and above organizational career management (OCM; incremental validity). Specifically, while controlling for the presence of organizational initiatives to enhance career management (e.g., being given challenging tasks or important information about job opportunities), career crafting is expected to also positively relate to internal and external employability. The results of regression analysis supported this prediction because OCM, proactive career reflection, and proactive career construction related significantly to internal employability. However, with regard to external employability, only proactive career reflection related positively to external employability (for the study details, see the Appendix).

Discussion and Future Research Agenda

This chapter set out to explore how proactive behaviors targeted toward one's own job and career goals may ultimately facilitate the creation of a fulfilling career for oneself. With the increasing emphasis on self-management and proactivity in the job (Belschak & Den Hartog, 2010; Tims et al., 2012) and in the career domain (Akkermans & Kubasch, 2017), this topic represents an important aspect of contemporary working life. Proactive behaviors targeted toward one's own job are referred to as job crafting (Wrzesniewski & Dutton, 2001), whereas proactive behaviors directed at achieving a fulfilling career are introduced here as career crafting.

Table 10.3

The Career Crafting Survey

CAREER CRAFTING

The following statements are about the degree to which you are actively developing your career. Please indicate for each statement how often you perform this behavior.

	1	2	3	4	5	6
	Never	Rarely	Sometimes	Regularly	Often	Always
<i>Proactive career reflection</i>						
I spend time reflecting on my passions in my work and career	1	2	3	4	5	6
I deliberately think about what I would like to achieve in my career	1	2	3	4	5	6
I assess for myself what I really value in my career	1	2	3	4	5	6
I explore the possibilities available to me to continue developing myself	1	2	3	4	5	6
<i>Proactive career construction</i>						
I make sure that significant persons in my work are up to date about my performance and results	1	2	3	4	5	6
I deliberately show others what I am good at	1	2	3	4	5	6
I strengthen my career goals and make sure that they remain up to date	1	2	3	4	5	6
If I need to make a strong impression on others to attain my own goals, I make sure I clearly show them what I am capable of	1	2	3	4	5	6

Research has shown that job crafting is related to a better job in terms of an increased self-reported availability of job resources and challenging job tasks (Tims, Bakker, & Derks, 2013), work engagement, and job performance (Rudolph et al., 2017). As such, this proactive behavior represents an important way for individuals to create a job that fits them at any time in their careers (Kooij, Tims, & Kanfer, 2015). Drawing on parallels with job crafting, career competencies, and career self-management, we introduced career crafting and used two dimensions to define it, namely proactive career reflection and proactive career construction. That is, individuals who proactively reflect on their career motivations and skills, and who proactively try to advance their careers by networking, may be more likely to achieve careers they find fulfilling. Furthermore, we described the initial results of a newly developed scale to measure career crafting, the CCS. Examining the measure in three independent samples, we ended up with eight items that reliably measured the two career crafting dimensions (i.e., proactive career reflection and proactive career construction) and showed that this measure is related to but different from existing measures of job crafting, career competencies, and career self-management. This is important because it shows that the CCS measure captures something new compared to existing and related constructs. Career crafting thus has the potential to enrich the field of careers. At the same time, acknowledging that this is a relatively unexplored area of research, we now turn to a discussion of avenues for future research and practice.

Future Directions for Research and Practice

First and foremost, empirical research is needed to further our knowledge about career crafting. Using the career crafting scale presented in this chapter may be a first step in this process. More advanced studies in which the career crafting scale is further validated and related to important career outcomes such as employability, objective career success (i.e., promotions and salary),

and different types of subjective career success (Mayrhofer et al., 2016; Shockley, Ureksoy, Rodopman, Poteat, & Dullaghan, 2016) over time would contribute to a better understanding of the impact of career crafting on desired career outcomes.

A second route for future research is to take into account the role of the context when studying the effects of job and career crafting behaviors. Although many of the studies discussed in this chapter focus on individual agency, the role of the context has not received much attention. However, agency will always interact with the context in which it is enacted, and this interaction forms the foundation of the sustainability of one's career (De Vos et al., 2018). Hence, incorporating the context into future studies will provide important knowledge about the boundary conditions under which individuals can behave more or less proactively with regard to their job and career and will also shed light on whether crafting can equally be performed by different types of worker groups (e.g., white-collar vs. blue-collar workers). As suggested by Seibert, Kraimer, Holtom, and Pierotti (2013), one such contextual factor that may influence career trajectories is career shocks. Career shocks are “disruptive and extraordinary events that are, at least to some degree, caused by factors outside the focal individual, and which trigger a deliberate thought process concerning one's career” (Akkermans, Seibert, & Mol, 2018, p. 4). Career shocks can be positive (e.g., promotion or pay raise) or negative (e.g., organizational change and departure of a mentor) (Seibert et al., 2013). Examining career crafting in combination with career shocks may provide a better understanding of whether and how individuals decide to craft their careers or may elucidate under which circumstances career crafting results in intended career outcomes or not. Individual differences such as resilience and adaptability may also play an important role here because some people might stop crafting after a

major career shock, whereas other might be triggered into action. Future research can shed more light on this important issue.

Another interesting contextual factor that has been overlooked in the literature on proactivity has been the role of others (e.g., co-workers, supervisors, and spouses) in shaping the extent to which one can be proactive. Some initial studies exist that examined the role of co-workers in facilitating or inhibiting job crafting behaviors (Bizzi, 2017) or in co-workers modeling job crafting behaviors (Peeters, Arts, & Demerouti, 2016), but the mechanisms through which these others actually influence proactive work behaviors have not yet been investigated. An important mechanism that remains to be tested is whether good (vs. bad) relationships with others may allow (vs. prohibit) individuals to engage in self-oriented crafting behaviors. With regard to career crafting, the influence of supervisors may be profound in that they may support the individual in reaching career goals or may be viewed as a role model for how to manage the career (Allen, Eby, Potteet, Lentz, & Lima, 2004). However, spouses may also be important to consider because recent research shows that spousal support may provide the resources to effectively manage one's career (Ocampo, Restubog, Liwag, Wang, & Petelczyc, 2018). It would be interesting to examine how the social context may impact (facilitate or inhibit) proactive job or career crafting and/or the outcomes of such behaviors.

Recommendations for practice are mainly based on empirical evidence related to job crafting research given the limited evidence for career crafting at this stage. However, we do think that some of the recommendations generalize to career crafting as well. Thus, where possible, we will reflect on both job and career crafting. First, based on the many beneficial outcomes individuals experience when they engage in job crafting (see the meta-analysis by Rudolph et al., 2017), it is important to know which factors may promote proactive behaviors.

The job characteristic autonomy in particular has been found to have important proactivity-enhancing effects. Autonomy may stimulate proactive behaviors because it provides employees with discretion in scheduling and carrying out the work (Hackman & Oldham, 1976) and contributes to the development of new, active behavior patterns (Karasek, 1979). Indeed, studies have found that autonomy is related to job crafting (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012). Moderate levels of job complexity may also stimulate proactivity, flexibility, and feelings of responsibility (Grant & Parker, 2009) without overwhelming employees, whereas high levels of job complexity may undermine these behaviors. In summary, providing work that is autonomous and challenging will encourage proactive behaviors (Unsworth & Parker, 2003), and we expect that this process will be similar for career crafting.

Second, studies have also shown the importance of employer support for activities that help employees develop themselves and their careers, which makes them more likely to perform well, be less absent, and less likely to leave the organization (Kaye & Jordan-Evans, 2000). Support can be provided by allowing individuals to take part in developmental courses or concrete support from the supervisor for crafting specific work characteristics or working toward one's career goals. For example, supervisors could provide individuals with increasingly more difficult job assignments that can support the development of employees in the direction they want. Furthermore, providing support to employees in how to craft their jobs or careers may also inform employees about which crafting behaviors are supported and which behaviors may be harmful for the team or organization. Note that these recommendations are tied to one's job and employing organization, which fits with the notion of job crafting. However, career crafting has a broader scope and orientation, which implies that individuals would also benefit from seeking

autonomy and support outside of their current jobs and in different domains (e.g., family and hobbies).

Conclusion

The aim of this chapter was to highlight that when individuals know what they want in their jobs and careers, they may engage in proactive behaviors aimed to achieve those personal goals.

Individuals may greatly benefit from creating these conditions for themselves, and organizations may also reap the benefits of a highly engaged workforce.

Appendix

Scale Development and Validation Analyses

Study 1: Scale Development

Data for the first study were collected in the Netherlands among employees working in different sectors and occupations. The sample consisted of 361 participants, of whom 181 (50.1%) were female, with a mean age of 38.7 years ($SD = 14.4$). Participants worked on average 30.9 hours per week ($SD = 12.5$) and had an average total work experience of 17.7 years ($SD = 13.2$).

We first ran EFA with an oblique rotation because the factors were assumed to be correlated. Our criterion to retain items was when factor loadings were $\geq .60$ on the primary factor and $\leq .30$ for loadings on another factor. These are rather conservative criteria because we wanted to reduce the overinclusive item set. The EFA showed that there were several items that formed their own factor, which resulted in the deletion of 4 items, and 10 items that loaded $< .60$ on a factor. Deletion of these items resulted in 10 items divided over two factors that passed our criteria, resulting in two factors of 5 items each. Note that 1 item of the proactive career construction factor loaded slightly less than $.60$ on this factor ($.597$). However, this is such a small difference that we decided to keep it in at this stage. The reliability of the two dimensions was good (proactive career reflection, $\alpha = .86$; proactive career construction, $\alpha = .85$). Thus, we continued our analyses for sample 2 with these 10 items.

Study 2: Scale Validation

Data were collected in the Netherlands among employees in different sectors and occupations.

The sample consisted of 491 participants, of whom 233 (47.5%) were female, with a mean age of

35.3 years (SD = 14.3). Participants worked on average 26.6 hours per week (SD = 14.6) and had an average total work experience of 15.2 years (SD = 12.5).

Confirmatory factor analyses with AMOS 22 indicated that the expected two-factor model of the 10-item CCS consisting of proactive career reflection and proactive career construction could be replicated in this new study. Specifically, the two-factor model fits the data significantly better than a one-factor model, in which all 10 items loaded on the same factor ($\Delta\chi^2 = 165.58$, $\Delta df = 2$, $p < .001$). However, model fit indicated misspecification at the item level ($\chi^2 = 217.77$, $df = 34$, comparative fit index [CFI] = 0.92, Tucker–Lewis index [TLI] = 0.89, root mean square error of approximation [RMSEA] = 0.11). One item from the proactive career reflection scale loaded .577 on the factor and was therefore removed from the model (i.e., “I actively think about what I really like in my work”). In addition, although the item that loaded $<.60$ on the career construction factor in Sample 1 now loads .681, modification indices suggested to include several covariates to this item, which indicates misspecification (i.e., “I set goals for where I want to be in my career 1 year from now”). Removing these 2 items from the CFA resulted in an improved model fit ($\chi^2 = 98.03$, $df = 19$, CFI = .95, TLI = .93, incremental fit index = .95, RMSEA = .09). Thus, we kept 4 items assessing proactive career reflection and 4 items assessing proactive career construction that could be reliably measured (proactive career reflection, $\alpha = .80$; proactive career construction, $\alpha = .85$).

Second, correlational analysis showed that proactive career reflection related positively with all dimensions of job crafting (ranging between $r = .12$, $p < .05$ and $r = .59$, $p < .01$), career competencies (ranging between $r = .33$ and $r = .47$, all p 's $< .01$), and career-self management ($r = .57$, $p < .01$). Similar results were found for proactive career construction: It related positively with all dimensions of job crafting (ranging between $r = .28$ and $r = .49$, all p 's $< .01$), career

competencies (ranging between $r = .26$ and $r = .54$, all p 's $< .01$), and career-self management ($r = .62$, $p < .01$).

Study 3: Incremental Validity

The goal of this third study was to examine whether career crafting adds unique value to the prediction of internal and external perceived employability over and above OCM. Specifically, while controlling for the presence of organizational initiatives to enhance career management (e.g., being given challenging tasks or important information about job opportunities), career crafting is expected to also positively relate to internal and external employability.

Data were collected in the Netherlands with the help of student assistants. Participants worked in various sectors and occupations. The sample consisted of 420 participants, of whom 246 (58.4%) were female. The mean age was 36.11 years ($SD = 12.73$). Participants worked on average 35.07 hours per week ($SD = 21.45$) and had an average total work experience of 14.15 years ($SD = 12.67$), 8.25 years ($SD = 9.15$) of which in their current organization.

The results of a regression analysis showed that after controlling for OCM, both proactive career reflection and construction were positively related to internal employability (Table 10.4). The results show a different pattern for external employability: After controlling for OCM, only proactive career reflection relates to external employability.

Table 10.4

Results of Regression Analysis in Which Career Crafting Predicts Employability

	Internal Employability		External Employability	
	β	ΔR^2	β	R^2
Model 1				
OCM	.45**	.20*	.15*	.02*
Model 2				
OCM	.37**		.06	
CC-R	.14*		.26**	
CC-C	.13*	.05*	.10	.10**

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

OCM, organizational career management.

References

- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. B. (2013). Competencies for the contemporary career: Development and preliminary validation of the career competencies questionnaire. *Journal of Career Development, 40*, 245–267.
- Akkermans, J., & Kubasch, S. (2017). #Trending topics in careers: A review and future research agenda. *Career Development International, 22*, 586–627.
- Akkermans, J., Paradniké, K., Van der Heijden, B. I. J. M., & De Vos, A. (2018). The best of both worlds: The role of career adaptability and career competencies in students' well-being and performance. *Frontiers in Psychology, 9*, 1678.

- Akkermans, J., Seibert, S. E., & Mol, S. T. (2018). Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology, 44*, 1–10.
- Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology, 66*, 168–195.
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology, 89*, 127–136.
- Arthur, M. B., Khapova, S. N., & Wilderom, C. P. M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior, 26*, 177–202.
- Arthur, M. B., & Rousseau, D. M. (1996). Introduction: The boundaryless career as a new employment principle. In M. B. Arthur & D. M. Rousseau (Eds.), *The boundaryless career: A new employment principle for a new organizational era* (pp. 3–20). New York, NY: Oxford University Press.
- Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. *Journal of Managerial Psychology, 22*, 309–325.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*, 273–285.
- Belschak, F. D., & Den Hartog, D. N. (2010). Pro-self, prosocial, and pro-organizational foci of proactive behaviour: Differential antecedents and consequences. *Journal of Occupational and Organizational Psychology, 83*, 475–498.

- Berg, J. M., Wrzesniewski, A., & Dutton, J. E. (2010). Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior, 31*, 158–186.
- Bizzi, L. (2017). Network characteristics: When an individual's job crafting depends on the jobs of others. *Human Relations, 70*, 436–460.
- Blokker, R., Akkermans, J., Tims, M., Jansen, P., & Khapova, S. (2019). Building a sustainable start: The role of career competencies, career success, and career shocks in young professionals' employability. *Journal of Vocational Behavior, 112*, 172–184.
- Brenninkmeijer, V., & Hekkert-Koning, M. (2015). To craft or not to craft: The relationships between regulatory focus, job crafting and work outcomes. *Career Development International, 20*, 147–162.
- Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior, 69*, 4–18.
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology, 85*, 65–74.
- Clarke, M. (2008). Understanding and managing employability in changing career contexts. *Journal of European Industrial Training, 32*, 258–284.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*, 435–462.
- De Cuyper, N., & De Witte, H. (2010). Temporary employment and perceived employability: Mediation by impression management. *Journal of Career Development, 37*, 635–652.
- De Cuyper, N., & De Witte, H. (2011). The management paradox: Self-rated employability and organizational commitment and performance. *Personnel Review, 40*, 152–172.

- De Vos, A., Akkermans, J., & Van der Heijden, B. I. J. M. (in press). From occupational choice to career crafting. In H. Gunz, M. Lazarova, & W. Mayrhofer (Eds.), *The Routledge companion to career studies*. Abingdon, UK: Routledge.
- De Vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational and Organizational Psychology*, 82, 761–777.
- De Vos, A., De Hauw, S., & Van der Heijden, B. I. J. M. (2011). Competency development and career success: The mediating role of employability. *Journal of Vocational Behavior*, 79, 438–447.
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior*, 73, 449–456.
- De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2018). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*. Advance online publication. doi:10.1016/j.jvb.2018.06.011
- Demerouti, E., & Peeters, M. C. (2018). Transmission of reduction-oriented crafting among colleagues: A diary study on the moderating role of working conditions. *Journal of Occupational and Organizational Psychology*, 91, 209–234.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24, 689–708.
- Forrier, A., Verbruggen, M., & De Cuyper, N. (2015). Integrating different notions of employability in a dynamic chain: The relationship between job transitions, movement capital and perceived employability. *Journal of Vocational Behavior*, 89, 56–64.

- Fuller, J. B., Marler, L. E., & Hester, K. (2006). Promoting felt responsibility for constructive change and proactive behavior: Exploring aspects of an elaborated model of work design. *Journal of Organizational Behavior, 27*, 1089–1120.
- Gordon, H. J., Demerouti, E., LeBlanc, P. M., & Bipp, T. (2015). Job crafting and performance of Dutch and American health care professionals. *Journal of Personnel Psychology, 14*, 192–202.
- Gowan, M. A. (2014). Moving from job loss to career management: The past, present, and future of involuntary job loss research. *Human Resource Management Review, 24*, 258–270.
- Grant, A. M., & Parker, S. K. (2009). Redesigning work design theories: The rise of relational and proactive perspectives. *Academy of Management Annals, 3*, 317–375.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463–488.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behaviour and Human Performance, 16*, 250–279.
- Hall, D. T. (1996). Protean careers of the 21st century. *Academy of Management Executive, 10*, 8–16.
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior, 65*, 1–13.
- Harju, L. K., Hakanen, J. J., & Schaufeli, W. B. (2016). Can job crafting reduce boredom and increase work engagement? A three-year cross-lagged panel study. *Journal of Vocational Behavior, 95*, 11–20.

- Hirschi, A., Freund, P. A., & Herrmann, A. (2014). The Career Engagement Scale. *Journal of Career Assessment, 22*, 575–594.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 258–308.
- Kaye, B., & Jordan-Evans, S. (2000). Retention: Tag, you're it! *Training and Development, 54*, 29–33.
- King, Z. (2001). Career self-management: A framework for guidance of employed adults. *British Journal of Guidance & Counselling, 29*, 65–78.
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior, 65*, 112–133.
- Kooij, D. T. A. M., Tims, M., & Akkermans, J. (2017). The influence of future time perspective on work engagement and job performance: The role of job crafting. *European Journal of Work and Organizational Psychology, 26*, 4–15.
- Kooij, D. T. A. M., Tims, M., & Kanfer, R. (2015). Successful aging at work: The role of job crafting. In P. M. Bal, D. T. A. M. Kooij, & D. M. Rousseau (Eds.), *Aging workers and the employee–employer relationship* (pp. 145–161). Cham, Switzerland: Springer.
- Kuijpers, M. A. C. T., Schyns, B., & Scheerens, J. (2006). Career competencies for career success. *Career Development Quarterly, 55*, 168–178.
- Lang, J., Kern, M., & Zapf, D. (2016). Retaining high achievers in times of demographic change: The effects of proactivity, career satisfaction and job embeddedness on voluntary turnover. *Psychology, 7*, 1545–1561.

- Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology, 60*, 557–568.
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal, 48*, 764–775.
- Lu, C. Q., Wang, H. J., Lu, J. J., Du, D., & Bakker, A. B. (2014). Does work engagement increase person–job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior, 84*, 142–152.
- Lysova, E. I., Jansen, P. G. W., Khapova, S. N., Plomp, J., & Tims, M. (2018). Examining calling as a double-edged sword for employability. *Journal of Vocational Behavior, 104*, 261–272.
- Mattarelli, E., & Tagliaventi, M. R. (2015). How offshore professionals’ job dissatisfaction can promote further offshoring: Organizational outcomes of job crafting. *Journal of Management Studies, 52*, 585–620.
- Mayrhofer, W., Briscoe, J. P., Hall, D. T., Dickmann, M., Dries, N., Dysvik, A., . . . Unite, J. (2016). Career success across the globe: Insights from the 5C project. *Organizational Dynamics, 45*, 197–205.
- Ocampo, A. C. G., Restubog, S. L. D., Liwag, M. E., Wang, L., & Petelczyc, C. (2018). My spouse is my strength: Interactive effects of perceived organizational and spousal support in predicting career adaptability and career outcomes. *Journal of Vocational Behavior, 108*, 165–177.

- Ohly, S., & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *Journal of Organizational Behavior, 31*, 543–565.
- Parker, S. K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. *Annual Review of Psychology, 65*, 661–691.
- Parker, S. K., Bindl, U. K., & Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management, 36*, 827–856.
- Peeters, M. C. W., Arts, R., & Demerouti, E. (2016). The crossover of job crafting between coworkers and its relationship with adaptivity. *European Journal of Work and Organizational Psychology, 25*, 819–832.
- Petrou, P., Demerouti, E., Peeters, M. C. W., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior, 33*, 1120–1141.
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2018). Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Management, 44*, 1766–1792.
- Plomp, J., Tims, M., Akkermans, J., Khapova, S. N., Jansen, P. G. W., & Bakker, A. B. (2016). Career competencies and job crafting: How proactive employees influence their well-being. *Career Development International, 21*, 587–602.
- Plomp, J., Tims, M., Khapova, S. N., Jansen, P. G. W., & Bakker, A. B. (2018). *The role of job crafting and contract type in the relationship between psychological safety and employability*. Working paper.

- Preenen, P., Verbiest, S., Van Vianen, A., & Van Wijk, E. (2015). Informal learning of temporary agency workers in low-skill jobs: The role of self-profiling, career control, and job challenge. *Career Development International, 20*, 339–362.
- Raub, S., & Liao, H. (2012). Doing the right thing without being told: Joint effects of initiative climate and general self-efficacy on employee proactive customer service performance. *Journal of Applied Psychology, 97*, 651–667.
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior, 102*, 112–138.
- Seibert, S. E., Kraimer, M. L., Holtom, B. C., & Pierotti, A. J. (2013). Even the best laid plans sometimes go askew: Career self-management processes, career shocks, and the decision to pursue graduate education. *Journal of Applied Psychology, 98*, 169–182.
- Shockley, K. M., Ureksoy, H., Rodopman, O. B., Poteat, L. F., & Dullaghan, T. R. (2016). Development of a new scale to measure subjective career success: A mixed-methods study. *Journal of Organizational Behavior, 37*, 128–153.
- Sturges, J., Conway, N., Guest, D., & Liefoghe, A. (2005). Managing the career deal: The psychological contract as a framework for understanding career management, organizational commitment and work behavior. *Journal of Organizational Behavior, 26*, 821–838.
- Tims, M., & Akkermans, J. (2017). Core self-evaluations and work engagement: Testing a perception, action, and development path. *PLoS One, 12*(8), e0182745.
doi:10.1371/journal.pone.0182745

- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology, 36*, 1–9.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the Job Crafting Scale. *Journal of Vocational Behavior, 80*, 173–186.
- Tims, M., Bakker, A. B., & Derks, D. (2013). The impact of job crafting on job demands, job resources and well-being. *Journal of Occupational Health Psychology, 18*, 230–240.
- Tims, M., Derks, D., & Bakker, A.B. (2016). Job crafting and its relationships with person–job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior, 92*, 44–53.
- Tornau, K., & Frese, M. (2013). Construct clean-up in proactivity research: A meta-analysis on the nomological net of work-related proactivity concepts and their incremental validities. *Applied Psychology, 62*, 44–96.
- Unsworth, K. L., & Parker, S. K. (2003). Proactivity and innovation: Promoting a new workforce for the new workplace. In D. Holman, T. D. Wall, C. W. Clegg, P. Sparrow, & A. Howard (Eds.), *The new workplace: A guide to the human impact of modern working practices* (pp. 175–196). Chichester, UK: Wiley.
- Van der Heijden, B. (2002). Prerequisites to guarantee life-long employability. *Personnel Review, 31*, 44–61.
- Van Emmerik, H., Schreurs, B., De Cuyper, N., Jawahar, I. M., & Peeters, M. C. W. (2012). The route to employability: Examining resources and the mediating role of motivation. *Career Development International, 17*, 104–119.
- Vanhercke, D., De Cuyper, N., Peeters, E., & De Witte, H. (2014). Defining perceived employability: A psychological approach. *Personnel Review, 43*, 592–605.

- Wang, H., Demerouti, E., & Bakker, A. B. (2016). A review of job crafting research: The role of leader behaviors in cultivating successful job crafters. In S. K. Parker & U. K. Bindl (Eds.), *Proactivity at work: Making things happen in organizations* (pp. 77–104). New York, NY: Routledge.
- Weseler, D., & Niessen, C. (2016). How job crafting relates to task performance. *Journal of Managerial Psychology, 31*, 672–685.
- Wrzesniewski, A. (2003). Finding positive meaning in work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 298–308). San Francisco, CA: Berrett-Koehler.
- Wrzesniewski, A., & Dutton, J. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26*, 179–201.
- Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. *Advances in Positive Organizational Psychology, 1*, 281–302.
- Zikic, J., & Klehe, U.-C. (2006). Job loss as a blessing in disguise: The role of career exploration and career planning in predicting reemployment quality. *Journal of Vocational Behavior, 69*, 391–409.