Job Crafting and Its Crossover between Colleagues: Do Goal Orientation and Transformational Leadership Matter?

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Samenvatting

Deze studie onderzocht de relatie tussen de doeloriëntatie van medewerkers, transformationeel leiderschap en job crafting, met als kader het Job Demands-Resources Model. Daarnaast werd onderzocht of er sprake is van crossover van job crafting tussen collega’s en in hoeverre doeloriëntatie en transformationeel leiderschap dit proces faciliteren. Er werd een dagboekstudie van drie dagen afgenomen onder 65 werkkoppels (N = 130). De participanten vulden tevens een algemene vragenlijst in. Om de hypothesen te toetsen werd gebruik gemaakt van structural equation modeling en multilevel-analyse. Uit de resultaten is gebleken dat werknemers met een mastery-approach eerder geneigd zijn hulpbronnen te zoeken en hun taakeisen op een constructieve manier te verlagen. Een performance-approach daarentegen was positief verbonden met het zoeken naar uitdagingen. De resultaten toonden het belang van transformationele leiders voor het zoeken naar hulpbronnen en uitdagingen. Verder bevestigden de resultaten de crossover van het zoeken naar hulpbronnen en het constructief verlagen van taakeisen. Een mastery-approach bleek dit proces in sommige gevallen te faciliteren. Daarnaast was er sprake van een crossover van het zoeken naar uitdagingen. Dit vond echter alleen plaats wanneer transformationeel leiderschap laag was. Over het geheel genomen lijken de resultaten erop te wijzen dat het aanmoedigen van een mastery-approach bij medewerkers en het aantrekken van transformationele leiders effectieve manieren zijn om job crafting onder werknemers te stimuleren.
Abstract

The present study examined the relationship between employees’ goal orientation, transformational leadership and job crafting, framed within the Job Demands-Resources Model. In addition, it examined the crossover of job crafting behaviors from one colleague to another, and whether goal orientation and transformational leadership facilitated this process. A diary study was conducted over three working days among 65 dyads (N =130). The respondents also filled out a general questionnaire. In order to test our hypotheses, we used structural equations modeling and multilevel analyses. Findings indicated that mastery-approach oriented employees were most likely to seek resources and reduce their demands constructively, whereas a performance-approach seemed to heighten employees’ seeking challenges. Our findings demonstrated the importance of transformational leaders in that they may stimulate employees to craft aspects of their job. Furthermore, results confirmed the crossover of seeking resources and reducing demands constructively, and indicated that, in some cases, a mastery-approach may even boost the crossover process. Seeking challenges crossed over between colleagues, but only when transformational leadership was low. Overall, findings suggest that encouraging employees’ mastery-approach and attracting transformational leaders might be effective ways to stimulate job crafting among employees.

*Keywords: Job crafting, goal orientation, transformational leadership, crossover, actor-partner interdependence model*
Introduction

In today’s world, organizations constantly need to adapt to rapidly changing circumstances (Daft, Murphy, & Willmott, 2010; Schaufeli, 2013). In order to meet the challenges of modern times, organizations have changed their organization design and management strategies over the years (Korver, 2006). A central characteristic of many organizations today is that the authority to make decisions has moved from top-down to lower levels in the organization, giving employees more responsibilities and greater autonomy (Daft et al., 2010; Schaufeli, 2013). In addition, there has been a greater reliance on teams which plan, organize and monitor more or less their own tasks (Bolman & Deal, 2008). These developments have reduced the direct control of managers as employees have more freedom in managing their own work (Schaufeli, 2013).

This employee empowerment requires preferably proactive employees who seize opportunities, and are not afraid of taking responsibility without close supervision (Crant, 2000; Parker, Bindl, & Strauss, 2010). Thus, it is not surprising that proactivity of employees is an increasingly important subject for both organizations and organizational researchers (Thomas, Whitman, & Viswesvaran, 2010). Previous studies have shown that employees’ proactivity is associated with a wide variety of positive outcomes such as increased job performance and greater innovation (Tornau & Frese, 2013), career success (Fuller & Marler, 2009), and higher job satisfaction (Li, Liang, & Crant, 2010).

Recently, researchers have shown an increased interest in the concept of job crafting, which can be regarded as “a specific form of proactive work behavior” (Tims & Bakker, 2010, p.1). With job crafting employees adjust job characteristics to their needs and abilities in order to achieve their own goals such as improving the fit with their job, and enhancing relationships with coworkers (Berg, Dutton, & Wrzesniewski, 2008; Tims & Bakker, 2010). Job crafting behaviors are initiated by the employee, often without active involvement of the
supervisor or organization (Lyons, 2008; Wrzesniewski & Dutton, 2001). Prior research has linked job crafting to various beneficial outcomes such as organizational commitment and job satisfaction (Ghitulescu, 2006), work engagement (Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012) and job performance (Bakker, Tims, & Derks, 2012; Tims, Bakker, Derks, Van Rhenen, 2013b).

Because job crafting is a relatively new research field, there are still many unresolved issues. Firstly, although some researchers have previously examined the influence of individual characteristics on job crafting (e.g., Petrou, Demerouti, & Schaufeli, 2013), to our knowledge, no study has addressed the relationship between employees’ goal orientation and their willingness to engage in job crafting behaviors yet. Linking employees’ goal orientation to job crafting may increase our understanding of why some individuals craft their jobs more than others, as goal orientations have been related to the motivation of individuals to learn and their need for achievement (Elliot & McGregor, 2001; Van de Walle, 2003).

Secondly, little is known about the influence of leadership in employees’ job crafting behaviors. Recently, several researchers underlined the importance of examining the role of the supervisor (e.g., Tims & Bakker, 2010), since they can stimulate or discourage employees’ proactive initiatives. For example, previous research has demonstrated that supervisors can positively affect subordinates’ proactive feedback seeking by being supportive and reducing the perceived costs of requesting feedback (see also Ashford, Blatt, & Van de Walle, 2003).

Thirdly, while most studies focus on job crafting at the individual level, there has been little empirical research into the crossover of job crafting behaviors between colleagues (i.e., inter-individual level). Until now, most research on the crossover process have focused on the crossover of positive or negative psychological states between individuals (e.g., Bakker & Xanthopoulou, 2009), but it is not clear whether proactive behaviors can also be transferred
from one person to another. To our knowledge, only two studies have addressed the question of crossover of job crafting between colleagues (Arts, Demerouti, & Peeters, 2014; Sanz-Vergel, 2014), but much is still unknown about the factors which facilitate this process.

In order to increase our understanding of why some employees craft their jobs more than others, the present study examines the role of goal orientation and transformational leadership on job crafting both at the individual and inter-individual level. First, we examine how goal orientation and transformational leadership are related to employees’ job crafting (i.e., individual level). Second, we examine the crossover of job crafting behaviors between colleagues on a daily basis, and to what extent goal orientation and transformational leadership facilitate this process (i.e., inter-individual level). To determine whether job crafting behaviors cross over from one colleague (the actor) to another colleague (the partner), we use the actor-partner interdependence model (APIM; Kenny & Cook, 1999), which allows the testing of reciprocal effects. By doing so, the second part of our research is a replication and extension of the daily diary study by Arts and colleagues (2014). A diary design has various advantages as it not only reduces retrospective bias, but also makes it possible to investigate daily fluctuations in job crafting (Ohly, Sonnentag, Niessen, & Zapf, 2010).

Our study not only contributes to the literature by investigating the role of goal orientation and leadership on job crafting, but it also enhances our understanding of crossover of job crafting between colleagues. Since proactive employees become increasingly important for organizations (Parker et al., 2010), the present study offers organizations insight into job crafting behaviors, and how these proactive work behaviors might be stimulated.

**Theoretical Background**

Job crafting has emerged from the job redesign tradition, in which a central aim was to increase positive psychological states (e.g., motivation, job satisfaction) by making work more interesting for employees, while enhancing positive organizational outcomes such as
productivity simultaneously (Demerouti & Bakker, 2014; Griffin & McMahan, 1994). However, an important difference between job crafting and traditional job redesign thinking is that in job crafting the changes in job characteristics are self-initiated by the employee, instead of being top-down imposed (Tims & Bakker, 2010). Hence, being a bottom-up strategy, job crafting can be seen as “job redesign on the individual level”, which occurs within the boundaries of the job (Tims & Bakker, 2010, p.1). For job crafting to take place, employees do not need to consult their manager (Wrzesniewski & Dutton, 2001).

Recently, several studies have framed job crafting within the Job-Demands Resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), in that employees craft their jobs by heightening or lowering the level of job demands and job resources, depending on their needs (e.g., Petrou et al., 2012; Tims, Bakker, & Derks, 2012). The JD-R model incorporates two distinctive processes, namely a motivational and an energetic process (Demerouti & Bakker, 2011). In the energetic process, high job demands (e.g., workload) cause strain and depletion of energy reserves, which can lead to burnout and other health problems. In the motivational process, job resources such as feedback of the supervisor support the attainment of goals, which may increase the motivation of employees over time. Previous research has not only demonstrated that job resources stimulate personal development and boost work engagement (Schaufeli & Bakker, 2004), but also that they may have a buffering role when job demands are high (Bakker, Demerouti, & Euwema, 2005). As such, the changes employees make in their job characteristics by crafting their job are likely to have an effect on the energetic and motivational process. For example, Tims, Bakker and Derks (2013a) showed that employees who crafted their job resources indeed increased their resources over time. Moreover, they found that crafting job resources and challenging job demands were positively related to employees’ well-being.
In this study, the conceptualization of job crafting proposed by Petrou and colleagues (2012) will be used, since it offers a clear framework for investigating the extent to which employees change their job characteristics both in general and on a daily basis. In their study Petrou and colleagues (2012) identified three dimensions of job crafting based on the JD-R model: 1) Seeking resources, 2) Seeking challenges, and 3) Reducing hindering demands. Seeking resources refers to proactive work behaviors through which employees increase their job resources. For example, learning new things at work and asking advice from others. Seeking challenges represents proactive behaviors such as asking for more responsibilities or challenging tasks, which leads to an increase in job demands. The last dimension reducing demands refers to behaviors which decrease the level of job demands by, for example, ensuring that the job is mentally or physically less demanding (Petrou et al., 2012).

In the job crafting literature, it has been suggested that different motivations of employees may lead to different job crafting behaviors and outcomes (Wrzesniewski & Dutton, 2001). Employees with a high intrinsic motivation have been considered to demonstrate expansive job crafting behaviors (i.e., expanding the boundaries of their task and relations), which may foster feelings of control over one’s life and competence. On the contrary, extrinsic motivated individuals have been suggested to craft their jobs in ways that limit their job demands and job resources (Wrzesniewski & Dutton, 2001). Recent empirical evidence indeed suggests that there are other processes at stake when employees reduce their job demands compared to increasing their job demands or resources, a point which was also made by Tims and colleagues (2013b). For example, Bakker and colleagues (2012) have demonstrated that both increasing job resources and heightening challenging job demands are positively associated with work engagement, whereas reducing job demands has been found to either have a negative association with work engagement (Petrou et al., 2012) or no
association at all (e.g., Tims et al., 2012). Expansive job crafting therefore seems to better fit the motivational process of the JD-R model than reducing job demands.

Since we are especially interested in the motivational process and its outcomes, our study will only focus on the dimensions seeking resources and seeking challenges, as these dimensions represent expansive job crafting behaviors. Furthermore, we argue that a dimension which includes more constructive ways of reducing job demands has been overlooked in the job crafting literature. Although previous research on proactivity outlined the relevance of proactive work behaviors such as improving faulty procedures and solving problems (Fuller & Marler, 2009; Tornau & Frese, 2013), until now, no study of job crafting has included such types of behaviors. Therefore, we have developed a fourth dimension “Reducing demands constructively”, which includes proactive behaviors such as improving work processes and routines. In our opinion, these are more constructive ways of reducing job demands, which, unlike the previously developed dimension, may even boost work engagement and performance.

**Employees’ goal orientation**

In the last few years, scholars have examined various individual differences such as proactive personality (e.g., Bakker et al., 2012) and regulatory focus (e.g., Petrou et al., 2013), in order to explain why some employees are more likely to engage in job crafting behaviors than others. We argue that another relevant individual difference may be the goal orientation of employees, since these orientations have been found to be related to the motivation of individuals to learn and to their need for achievement (Elliot & McGregor, 2001; Van de Walle, 2003), both potentially relevant motives for engaging in job crafting behaviors. Belschak and Den Hartog (2010) even suggested that goal orientation may be more informative about the antecedents of proactive behaviors than proactive personality, as the
latter may be similarly related to all proactive behaviors, whereas different goal orientations are thought to have differential behavioral consequences (see also Elliot & McGregor, 2001). Although previous studies have linked different employees’ goal orientations to various proactive behaviors (e.g., Belschak & Den Hartog, 2010), no study to date has related the role of employees’ goal orientation to job crafting.

In the achievement goal literature, the goal orientation of individuals is sometimes seen as a “relatively stable disposition” (Van de Walle, 2003, p.584), but it is also known to vary depending on the situation (e.g., Ames & Archer, 1988; Elliot & Dweck, 1988). For example, a meta-analysis by Van Yperen, Blaga, and Postmes (2014b) showed that a situationally induced goal orientation affected individual’s task performance. Prior work by Elliot and McGregor (2001) has distinguished four different goal orientations: 1. Mastery-approach orientation, 2. Performance-approach orientation, 3. Mastery-avoidance orientation, 4. Performance-avoidance orientation (see also Van Yperen, 2004). Empirical evidence has related different goal orientations to specific underlying motives, namely the need for achievement and the need to avoid failure (Elliot & Dweck, 1988; Elliot & McGregor, 2001). Although Elliot and McGregor (2001) have suggested both an approach and an avoidance dimension, our study will only focus on the approach dimension, as previous studies have shown that employees high on the avoidance dimension are less likely to show proactive behaviors (Belschak & Den Hartog, 2010; Porath & Bateman, 2006).

Whereas mastery-approach oriented employees strive to develop their competence by extending their skills, increasing their knowledge, and mastering new tasks, performance-approach oriented employees strive to demonstrate their competence compared to others (Elliot & Church, 1997; Elliot & Dweck, 1988; Elliot & McGregor, 2001). The latter individuals are focused on the attainment of positive performance appraisals. Prior research has related a mastery-approach to various positive outcomes such as innovative job
performance (Janssen & Van Yperen, 2004), and proactive feedback seeking (Van de Walle & Cummings, 1997). Mastery-oriented employees value feedback, because it helps them to develop their capacities and to master tasks (Van de Walle & Cummings, 1997; Van de Walle, Ganesan, Challagalla, & Brown, 2000). In addition, several studies have demonstrated that individuals who adopt mastery goals not only prefer challenging tasks, and use more effective learning strategies, but also believe that effort will lead to success (e.g., Ames & Archer, 1988; Elliot & Dweck, 1988).

It has been suggested that performance-approach oriented employees engage in similar proactive behaviors in order to outperform others, and to create a competitive advantage (Porath & Bateman, 2006). Previous research has shown that the performance-approach of employees was positively related to organizational, personal, and interpersonal proactive behaviors such as acquiring new knowledge, finding new ways to accomplish tasks to be more successful (Belschak & Den Hartog, 2010), and proactive feedback seeking (Porath & Bateman, 2006). Thus, even though the motives to engage in proactive behaviors may differ (see also Porath & Bateman, 2006), both mastery and performance-approach oriented employees are likely to seek feedback, knowledge and challenging tasks, and to demonstrate innovative job behaviors (i.e., making constructive changes in the job). This leads to the following predictions:

**Hypothesis 1:** Employees’ mastery-approach is positively related to a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively.

**Hypothesis 2:** Employees’ performance-approach is positively related to a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively.

However, although both goal orientations have been linked to the need for achievement, performance-approach oriented individuals also have been reported to show an
underlying fear of failure (Elliot & McGregor, 2001). These mixed feelings may impose some constraints on the latter individuals, thereby possibly holding them back from reaching their full potential. Thus, performance-approach oriented employees may ask for new tasks, and implement innovative changes in their job, only when the risk of failure is not too high, since it may undermine their feelings of competence. In addition, it has been suggested that performance-oriented individuals may seek feedback as a management impression strategy (e.g., asking for feedback when one succeeds) (Porath & Bateman, 2006; Van de Walle et al., 2000), and that they may be less interested in process feedback (i.e., information about their strategy) (Van de Walle, 2003). Mastery-oriented employees, in contrast, are more likely to persist in the face of obstacles (e.g., overcoming resistance to change, difficult tasks), and have been found to ask for help when needed (see also Elliot, 1999). Therefore, we predict the following:

_Hypothesis 3:_ The relationships of employees’ mastery-approach with a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively, are higher than those of performance-approach.

**Transformational leadership**

Although employees have been found to craft their jobs frequently without their supervisors being aware of this (Lyons, 2008), the role of the supervisor might be important for various job crafting behaviors (Tims & Bakker, 2010). A leadership style which has often been linked to proactive work behaviors of employees is the transformational, sometimes referred to as charismatic, leadership style. Transformational leadership has been related to employees’ organizational and interpersonal proactive behavior (Belschak & Den Hartog, 2003), and employees’ innovation behaviors (Rank, Nelson, Allen, & Xu, 2009). In addition, Strauss, Griffin and Rafferty (2009) have suggested that the transformational style of team leaders
enhances proactivity by strengthening employees’ belief in their ability to initiate changes in their work. Transformational leaders pay attention to their subordinates opinions and feelings, and empower employees by encouraging them to take greater responsibility and initiative (De Hoogh, Den Hartog, & Koopman, 2004). They are leading by example and formulate an inspiring vision of the future, which may motivate employees to take action (Strauss et al., 2009). As a result, transformational leaders are likely to provide a context which enhances job crafting behaviors of employees. Based on these rationales and previous empirical findings we predict the following:

**Hypothesis 4:** Employees’ perception of their supervisor’s transformational leadership is positively related to employees’ a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively.

An important question that is still unanswered in this respect is whether and how employees’ goal orientation and transformational leadership interact on proactive work behaviors. According to Parker and colleagues (2010), individual differences and contextual variables (e.g., leadership) may interact in various ways, depending on the specific situation and the specific individual characteristic. An individual’s predisposition may be triggered and stimulated by a favorable context. For instance, Kim and Wang (2008) found that proactive employees are more likely to seek feedback in a positive organizational climate than those who scored low on proactivity. Contextual variables such as transformational leadership may also play a compensatory role. Rank and colleagues (2009), for example, reported that employees with lower organization-based self-esteem were more strongly influenced by a transformational leader to show innovative behaviors than employees with higher levels of organization-based self-esteem. It also seems to work the other way around, in that favorable individual characteristics may compensate a weak leader (e.g., Rank et al., 2009; see also
Parker et al., 2010). As this is yet an unresolved issue, we formulate the following exploratory research question: *Is there an interaction between employees’ goal orientation and transformational leadership on job crafting behaviors?*

The hypothesized model is shown in Figure 1.

![Diagram](image)

*Figure 1. Hypothesized model*

*Note: Dashed lines represent the exploratory research question*

**Crossover of day-level job crafting**

Prior empirical findings have shown that various psychological states such as work engagement (e.g., Bakker & Demerouti, 2009), and day-specific self-esteem (Neff, Sonnentag, Niessen, & Unger, 2012) can transfer from one individual to another (see also
Bakker, Westman, & Van Emmerik, 2009). This process is known as crossover and has previously been defined as “a dyadic, inter-individual transmission of well-being between closely related individuals that occurs within a particular domain (e.g., workplace or family)” (Bakker & Xanthopoulou, 2009, p. 1563; Westman, 2001). Several studies have shown that crossover of psychological states not only takes place between partners, but also at work between colleagues. For example, a study by Bakker, Van Emmerik, and Euwema (2006) revealed that burnout and work engagement at the team level were associated with both states at the individual level. Bakker and Xanthopoulou (2009) found that work engagement transferred from one employee to another.

Since a growing number of individuals work in teams and often have to perform tasks together (Bolman & Deal, 2008), it becomes more likely that employees influence each other’s well-being and possibly even their behavior. Despite the heightened interest in the crossover of positive and negative psychological states between colleagues, only a few studies have examined the transmission of proactive work behaviors between employees. For example, Tims and colleagues (2013b) demonstrated that job crafting at the team level was related to individual job crafting behaviors. Research by Sanz-Vergel (2014) revealed a reciprocal relationship of all job crafting behaviors between colleagues. In addition, Arts and colleagues (2014) reported that on a daily level seeking challenges of colleagues were positively related to each other. The finding that job crafting may crossover from one colleague (the actor) to another (the partner) on a day-to-day level, suggests that the transmission of job crafting is not a static process, and that it can be transferred between colleagues even when the extent of job crafting changes (see also Bakker & Xanthopoulou, 2009).

Social learning theory (Bandura, 1977) may provide an explanation for the underlying mechanism of the crossover of job crafting behaviors between colleagues (see also Tims et
al., 2013b). Bandura (1977) proposed that most learning takes place through modeling and the observation of the behaviors of others. Team members are thought to influence each other through social norms (i.e., mostly implicit rules), which provide information about the way one should behave in a specific situation (Brown, 2000). By observing their colleagues on the job, employees are presumed to learn which work behaviors are appropriate and appreciated (see also Tims et al., in 2013b). Thus, employees are likely to engage in job crafting behaviors when they observe colleagues crafting their jobs, particularly when they perceive them as similar to themselves (e.g., when working closely together). Furthermore, individuals are more likely to imitate behavior of colleagues when they are rewarded for it (e.g., the supervisor complementing the subordinate on his task), or when they notice that others are rewarded for these behaviors (i.e., vicarious reinforcement) (Bandura, 1977). Since expansive job crafting behaviors are more likely to elicit positive responses from others, colleagues may be encouraged to display these behaviors as well. Altogether, these lines of evidence and arguments lead us to assert the following:

**Hypothesis 5a:** Actor’s day-level Seeking resources is positively related to partner’s (i.e., colleague’s) day-level Seeking resources.

**Hypothesis 5b:** Actor’s day-level Seeking challenges is positively related to partner’s (i.e., colleague’s) day-level Seeking challenges.

**Hypothesis 5c:** Actor’s day-level Reducing demands constructively is positively related to partner’s (i.e., colleague’s) day-level Reducing demands constructively.

**Moderators of the crossover process**

In the first part of this study, we examined the role of goal orientation and transformational leadership at the individual level. In order to gain a deeper understanding of the crossover
process, we will now investigate whether both factors also play a role at the inter-individual level.

**The role of goal orientation**

Previous studies have provided evidence for the importance of goal orientation in learning and achievement (e.g., Elliot & McGregor, 2001). As mentioned before, mastery-approach oriented individuals focus on learning, task mastery and developing their skills (Elliot & Church, 1997; Elliot & Dweck, 1988; Elliot & McGregor, 2001). One way to accomplish this is by observing and modeling the job crafting behaviors of colleagues, since these may provide opportunities for further learning. Performance-approach oriented individuals have a strong emphasis on performance, and strive to perform better than others (Elliot & McGregor, 2001). Observing colleagues engaging in job crafting such as taking on challenging tasks may encourage them to demonstrate similar behaviors, since they do not want to fall behind. Thus, although mastery and performance-approach may have different motivations for modeling the behavior of colleagues (i.e., developing skills versus demonstrating competence), both orientations are likely to stimulate the crossover of job crafting between colleagues. Therefore, we predict the following:

**Hypothesis 6**: The mastery-approach orientation of the partner moderates the crossover of job crafting. The crossover of a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively from actor to partner will be stronger when the partner exhibits a mastery-approach orientation.

**Hypothesis 7**: The performance-approach orientation of the partner moderates the crossover of job crafting. The crossover of a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively from actor to partner will be stronger when the partner exhibits a performance-approach orientation.
The role of transformational leadership

Supervisors are suggested to have great influence on the way teams operate, in that they have the power to stimulate or discourage specific work behaviors within teams (Day, Gronn, & Salas, 2004). Transformational leaders are believed to stimulate a safe learning climate within their teams (e.g., by conveying trust and respect, and decreasing the fear of making mistakes) (Bass, 1985), to heighten employees’ self-efficacy beliefs in challenging tasks (Strauss et al., 2009), and to empower their subordinates to take responsibility and initiative (De Hoogh et al., 2004). Research by Ozaralli (2003) revealed that empowerment of employees (which was associated with the transformational leadership style of their supervisor) was related to the extent team members exchanged ideas between each other, and the perceived team innovativeness. By providing a safe learning climate (e.g., not judging subordinates by mistakes made), boosting employees’ self-efficacy beliefs, stimulating mutual learning, and rewarding expansive job crafting behaviors when imitated, transformational leaders are likely to enhance the crossover of job crafting behaviors among their subordinates. Based on these arguments, we predict the following:

Hypothesis 8: The transformational leadership style of the supervisor moderates the crossover of job crafting. The crossover of a) Seeking resources, b) Seeking challenges, and c) Reducing demands constructively from actor to partner will be stronger when the partner perceives the supervisor as more transformational.
All crossover and moderating hypotheses are presented in Figure 2.

**Method**

**Sample and procedure**

A majority of the participants (58.5%) were recruited from a large retail organization, and the rest of the data (41.5%) were obtained from various organizations in the Netherlands. The data were obtained between October and December 2013. Comparisons between the two groups (1 = large retail organization, 2 = the rest) were made using ANOVA’s, which showed no major differences between the two groups on the study variables. The groups were therefore treated as one sample. Employees were asked by one of the researchers, whether they wanted to participate in the study together with a colleague with whom they worked closely together. The colleagues formed a dyad during the study period. They were asked to
fill out a general questionnaire, and a diary survey of three days, which were combined in a small printed booklet. Following the method described by Arts and colleagues (2014), the participants were instructed to fill out the day-level questionnaire at the end of their working day, preferable at the same time as their colleague but without consulting each other. Since some participants worked part-time and did not see their colleague every subsequent working day, some days between the diary study may exist. After completing both the general and the day-level questionnaire the dyads were requested to send the anonymous booklets back to the researchers. We only used the data if we received the booklets from both participants within a dyad. Each participant received a voucher of 10 euro for participating in the study.

Of the 250 participants (125 dyads) approached, we received useable responses from 130 individuals (65 dyads), representing a 52% response rate. Participants ($N = 130$) were on average 36.9 years old ($SD = 11.3$), ranging from 18 to 62 years. The sample included 87 females (66.9%) and 43 males (33.1%). On average, the employees were contracted for 30.1 hours per week ($SD = 7.9$), and their average organizational tenure was 8.2 ($SD = 7.1$) years. Of the participants, a majority (81.5%) worked in retail, 13.8% worked in governmental functions and 4.7% was employed in other sectors such as education. Thus, retail employees were overrepresented in the sample.

**Measures**

**General-level questionnaire**

**General-level of job crafting.** The general-level job crafting scale developed by Petrou and colleagues (2012) was used to measure the general job crafting dimensions seeking resources and seeking challenges. We used the same items as Arts and colleagues (2014), because we partially replicated their study. The dimension *seeking resources* includes four items (e.g., ‘I ask others for feedback on my job performance’), ranging from $1 = never$
to 5 = always (Cronbach’s $\alpha = .57$). The dimension *seeking challenges* consists of three items (e.g., ‘I ask for more responsibilities’), ranging from 1 = never to 5 = always (Cronbach’s $\alpha = .73$). We developed a new five-item dimension to assess the extent to which participants generally reduced their job demands in a constructive way. An example item of the dimension *reducing demands constructively* is ‘I improve working routines or procedures to make my job easier’ (1 = never, 5 = always). Cronbach’s $\alpha = .83$.

In order to confirm that a three-factor model best fitted the observed data, we conducted a confirmatory factor analysis. We used the following fit indices: chi-square/df ratio ($\chi^2/df$), Tucker-lewis Index (TLI), the Comparative Fit Index (CFI), the Incremental Fit Index (IFI) and the Root Mean Square Error of Approximation (RMSEA). A value of the chi-square/df ratio lower than 3 is said to show good model fit (Kline, 1998). The following values are said to indicate acceptable fit between the hypothesized model and the data: CFI ≥ .90, TLI ≥ .90, IFI ≥ .90, and RMSEA ≤ .08 (Byrne, 2001). The three-factor model showed moderate to adequate fit to the data, $\chi^2 = 93.99$, $df = 51$, $p < .001$, $\chi^2/df = 1.84$, CFI = .91, TLI = .88, IFI = .91, RMSEA = .08. In addition, we compared the three-factor model with a two and one-factor model. For the two-factor model we combined the dimensions seeking resources and seeking challenges, since these two dimensions showed the highest intercorrelation ($r = .63$, $p < .001$). Results demonstrated that the three-factor model fitted the data significantly better than the two-factor model ($\Delta \chi^2 = 21.27$, $\Delta df = 2$, $p < .001$) and the one-factor model ($\Delta \chi^2 = 130.60$, $\Delta df = 3$, $p < .001$). Factor loadings ranged from .41 to .90, except for one item of the dimension seeking resources (.27). Thus, our assumption that job crafting consists of three dimensions, namely seeking resources, seeking challenges and reducing demands constructively was confirmed. All items can be found in Appendix A.

**General-level of goal orientation.** In order to assess employees’ goal orientation, we used the Dutch version (Van Yperen, 2004) of the Achievement Goal Questionnaire (Eliot &
The original items were adapted to the work context, as the original items focuses on students (Peeters, Schreurs, & Damen, 2014). We included the two approach dimensions with three items each: 1) Mastery-approach (e.g., ‘I want to learn as much as possible in my work’; Cronbach’s $\alpha = .87$), and 2) Performance-approach (e.g., ‘It is important for me to do better than others at work’; Cronbach’s $\alpha = .77$). All items were answered on a 6-point Likert scale, ranging from 1 = strongly disagree to 6 = strongly agree (Appendix A).

**General-level of transformational leadership.** We assessed participants’ perceptions of the transformational leadership style of their supervisor by using 9 items of CLIO Questionnaire developed by De Hoogh and colleagues (2004). We selected the items based on the highest factor loadings on the dimension charismatic leadership (see De Hoogh et al., 2004). An example item is ‘My supervisor encourages employees to think for themselves’ (Cronbach’s $\alpha = .93$). All items were answered on a 6-point Likert scale, ranging from 1 = strongly disagree to 6 = strongly agree (Appendix A).

**Day-level questionnaire**

The day-level questions were the same for all three days.

**Day-level job crafting.** We used the day-level job crafting scale developed by Petrou and colleagues (2012) to assess day-level seeking resources and day-level seeking challenges. Day-level job crafting items are the same as the general-level items, but they focus on day-level instead of general behavior. Day-level seeking resources consists of four items, for example ‘Today…I have asked others for feedback on my job performance’ (Cronbach’s $\alpha = .66$). Day-level seeking challenges includes three items such as ‘Today…I have asked for more responsibilities’ (Cronbach’s $\alpha = .86$). All day-level items were answered on a 5-point Likert scale, ranging from 1 = totally does not apply to me, to 5 = totally applies to me. We
developed a new five-item dimension to assess the extent to which participants reduced their
job demands in a constructive way at day-level. An example item of the day-level dimension
*reducing demands constructively* is ‘Today…I have improved working routines or procedures
to make my job easier’ (1 = *totally does not apply to me*, 5 = *totally applies to me*). Cronbach’s α = .87. All day-level job crafting items can be found in Appendix A.

**Statistical analyses**

In order to test hypotheses 1 to 4 and the exploratory research question, we performed
structural equation modeling (SEM) analyses (N = 130), using the software program AMOS
(Arbuckle, 2006). We conducted the analyses in AMOS instead of hierarchical regression
analyses, as we were interested in testing the model for all three general-level job crafting
dimensions simultaneously. Furthermore, SEM enabled us to correct for measurement error.
We assessed model fit with the fit indices mentioned earlier. We only examined observed
variables, since it is recommended that for lower sample sizes than 200, models without latent
variables are used (Kenny, 2014). Following common practice, all variables were centered to
the grand mean (Dawson, 2014). In order to test the hypotheses, we examined the relationship
between mastery-approach, performance-approach, transformational leadership and all three
dimensions of general-level job crafting in one model. The two interaction terms (i.e., both
goal orientations x transformational leadership) were exploratory included in the analyses. In
line with recommended procedures for the testing of moderated structural equation models
(Cortina, Chen, & Dunlap, 2001), both interaction terms were not allowed to correlate with
their products. We only controlled for age, as this variable had the highest correlations with
the dependent variables. All other demographic variables were either unrelated or
inconsistently associated with the study variables.
For hypotheses 5 to 8, we used the MLwiN program (Rasbash, Browne, Healy, Cameron, & Charlton, 2000). To determine whether job crafting behaviors crossed over from one colleague (the actor) to another colleague (the partner), we used the actor-partner interdependence model (APIM; Kenny & Cook, 1999), thereby following the recommended method by scholars in the field (e.g., Xanthopoulou & Bakker, 2009; Arts et al., 2014). The APIM model takes into account that dyadic data are often nonindependent (Hox, 2010), since, for example, colleagues who work closely together share a common work environment. Using the APIM model makes it possible to calculate not only actor effects (i.e., intra-individual effects), but also partner effects (i.e., inter-individual and reciprocal effects) (Campbell & Kashy, 2002). Thus, in the present study, partner effects represented the crossover of day-level job crafting behaviors from the actor to the partner, as well as from the partner to the actor simultaneously.

We tested our hypotheses conducting multilevel analysis in MLwiN, which allowed for the division of data in multiple levels: Level 1 = three study days (repeated measures within-person; \( N = 390 \)), Level 2 = participants (between-person; \( N = 130 \)), and Level 3 = dyads (between-dyad; \( N = 65 \)). The days are nested within the participants, and the participants are, in turn, nested within the dyads. We used the following day-level variables: day-level seeking resources, seeking challenges, and reducing demands constructively. For the general-level the following variables were used: general-level seeking resources, seeking challenges, reducing demands constructively, mastery-approach, performance-approach, and transformational leadership. In order to gain unbiased results, it is recommended that predictor variables are centered in multilevel analyses (see also Bakker & Xanthopoulou, 2009; Hofmann & Gavin, 1998). Therefore, we centered all day-level predictors to each person’s mean across the three study days, and all general-level variables were centered to the
grand mean. In addition, we controlled for the partner’s age, and for partner’s general-level of job crafting.

**Results**

*Descriptive statistics.* Table 1 provides the correlations, means and standard deviations of the study variables. It is worth noting that age was negatively related to job crafting at a general-level, except for reducing demands constructively, and to all job crafting behaviors at day-level. Thus, older employees reported lower levels of job crafting behaviors than younger employees both in general and on a daily basis.

<table>
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<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
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<tr>
<td>Age</td>
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<td>11.3</td>
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<td>Mastery-approach</td>
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<td>-.16**</td>
<td>.37**</td>
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<td>Transformational leadership</td>
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<td>-.12*</td>
<td>.26**</td>
<td>.20*</td>
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<td>Seeking resources</td>
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<td>.60</td>
<td>-.32**</td>
<td>.29**</td>
<td>.18*</td>
<td>.26**</td>
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<td>Seeking challenges</td>
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<td>-.32**</td>
<td>.16**</td>
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<td>.23**</td>
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<td>Reducing demands constructively</td>
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<td>.13*</td>
<td>.31**</td>
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<td>.12*</td>
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*Note.* For all day-level variables we have calculated participants' mean scores of the 3 days (i.e., aggregate scores), *p ≤ .05, **p ≤ .01.

*Testing the hypothesized model.* The hypothesized model showed a relatively poor fit to the measured data, $\chi^2 = 28.50$, $df = 12$, $p = .005$. $\chi^2/df = 2.4$, CFI = .90, TLI = .70, IFI = .91, RMSEA = .10. The relatively poor fit of the data may indicate that too many free parameters in relation to the sample size are estimated (Kenny, 2014). Constraining the nonsignificant
paths to zero improved the fit considerably. Model comparison revealed that the constrained model fitted the data better than the hypothesized model, $\Delta \chi^2 = 1.19$, $\Delta df = 9$, $p = .10$. The fit indices of the resulting model represented a good fit to the data, $\chi^2 = 29.69$, $df = 21$, $p = .10$, $\chi^2/df = 1.4$, CFI = .95, TLI = .91, IFI = .95, RMSEA = .06. Figure 3 shows the results obtained from the analyses.

In Hypothesis 1, we proposed that mastery-approach would be positively related to all three job crafting behaviors. The results obtained from the SEM analyses showed that mastery-approach was positively related to seeking resources and reducing demands constructively, thereby providing support for Hypotheses 1a and 1c (see Figure 3). No significant result for seeking challenges was found (Hypothesis 1b rejected). Hypothesis 2 predicted a positive relationship between performance-approach and all three job crafting behaviors. As shown in Figure 3, the path between performance-approach and seeking challenges was positive and significant, which provided support for Hypothesis 2b (see Figure 3). Both Hypotheses 2a (seeking resources) and 2c (reducing demands constructively) were not supported. In Hypothesis 3, we proposed that the positive relationships between mastery-approach and job crafting behaviors would be stronger than those of performance-approach. Results indeed revealed that the paths between mastery-approach and seeking resources and between mastery-approach and reducing demands constructively were stronger, thereby supporting Hypothesis 3a and 3c (see Figure 3). Contrary to expectations, performance-approach was stronger related to seeking challenges than mastery-approach (Hypothesis 3b rejected; see Figure 3).
Consistent with our predictions, transformational leadership was positively related to seeking resources (Hypothesis 4a) and marginally positive to seeking challenges (Hypothesis 4b; see Figure 3). No support for Hypothesis 4c, which predicted a positive relationship between transformational leadership and reducing demands constructively, was found.

We examined the interactions between goal orientation (i.e., mastery-approach and performance-approach) and transformational leadership on the three job crafting behaviors to answer our exploratory research question. Results indicated that the interaction term mastery-approach x transformational leadership was marginally related to seeking resources (see Figure 3). Plotting the interaction (Dawson, 2014) showed that the positive association between transformational leadership and seeking resources was stronger for employees low on mastery-approach (see Figure 4).
We did not found evidence for the interaction between mastery-approach and transformational leadership on seeking challenges and on reducing demands constructively. In addition, no significant interactions were found between performance-approach and transformational leadership on all three job crafting behaviors.

**Multilevel modeling testing.** Before testing hypotheses 5-8, preliminary analyses were conducted to determine whether the use of a three-level model (dyads, persons, days) was appropriate. We tested the difference (i.e., deviance -2 x log difference test) between the intercept-only model with one level (i.e., days) and two levels (i.e., persons), and between a two-level model and a three-level model (i.e., dyads) for the three job crafting dimensions. Results of the deviance tests indicated that the three-level model fitted the measured data significantly better than the other two models (seeking resources Δ -2 x log (1) = 8.83, \( p < .01 \); seeking challenges Δ -2 x log (1) = 5.06, \( p < .05 \); reducing demands constructively Δ -2 x log (1) = 11.63, \( p < .001 \).

In addition, intraclass correlations showed that the three-level model explained a significant amount of the variance in the three job crafting variables. The variance attributed
to between-dyads variations ranged from 21.5% to 27.4%. The variance attributed to between-persons variations ranged from 29.8% to 46.3%. Finally, the variance attributable to within-persons ranged from 45.2% to 48.6%. Therefore, the use of multilevel modeling with three levels was supported for all three job crafting dimensions.

**Hypothesis testing.** In Hypothesis 5, we predicted that actor’s day level job crafting behaviors are positively related to partner’s day level job crafting. In order to test these relationships, we compared three nested models: (a) the null model (i.e., intercept-only model); b) Model 1, in which the control variables of the partner were added (i.e., age and general-level of the examined job crafting behavior); and Model 2, in which the predictor variables were added (i.e., all three job crafting behaviors). Results of APIM analyses supported the crossover from actor to partner for seeking resources (\( t = 3.04, p < .01 \); see Table 2) and reducing demands constructively (\( t = 4.52, p < .001 \); see Table 3). No significant result for seeking challenges was found (\( t = .88, ns \)). Thus, Hypotheses 5a and 5c were supported, but Hypothesis 5b was rejected.

| Table 2. Multi-level Estimates for Model 2 Predicting Day-level Seeking Resources Partner (N = 65 dyads, N = 130 persons, N = 390 data points) |
|-------------|--------|--------|--------|
| Variable                 | Estimate | SE     | t       |
| Constant                | 2.979   | 0.049  | 60.80 ***|
| Age partner             | -0.012  | 0.005  | -2.40 *  |
| General-level seeking resources partner | 0.379   | 0.087  | 4.36 ***|
| Day-level seeking resources actor | 0.161   | 0.053  | 3.04 **  |
| Day-level seeking challenges actor | 0.054   | 0.042  | 1.29     |
| Day-level reducing demands constructively actor | 0.028   | 0.047  | 0.60     |
| -2*log (ln)             | 771.791 |        |        |
| Diff-2*log              | 8.62*   |        |        |
| df                      | 3       |        |        |
| Between dyads (Level 3) variance | 0.000   | 0.000  |        |
| Between person (Level 2) variance | 0.212   | 0.040  |        |
| Within person (Level 1) variance | 0.294   | 0.026  |        |

*Note. *p < .05; **p < .01; ***p < .001.
In order to test the interaction effects (Hypotheses 6-8), we examined four different models: (a) the null model; (b) Model 1, in which the control variables of the partner were added (i.e., age, general-level of the examined job crafting behavior, and general-level of the moderator variable); (c) Model 2, in which we added all three job crafting behaviors; and (d) Model 3, in which we added the interaction term.

Hypothesis 6 predicted that the mastery-approach orientation of the partner would moderate the crossover of job crafting. Results indicated that the interaction term on reducing demands constructively was significant and in the expected direction ($t = 2.81, p < .01$; see Table 4), which provided support for Hypothesis 6c.
Plotting the interaction demonstrated that the positive relationship between actor’s reducing demands constructively and partner’s reducing demands constructively was stronger when the partner scored high on mastery-approach (see Figure 5).

Figure 5. The crossover of reducing demands constructively moderated by partner’s mastery-approach.
However, no significant results were found for the interaction term on seeking resources \((t = .28, ns)\), and seeking challenges \((t = -.08, ns)\). Thus, Hypothesis 6a and 6b were rejected.

Hypothesis 7 predicted that the performance-approach orientation of the partner would moderate the crossover of job crafting. No significant results were found for the interaction term on seeking resources \((t = -.45, ns)\), seeking challenges \((t = -1.68, ns)\), and reducing demands constructively \((t = -.07, ns)\). Therefore, Hypothesis 7 was rejected.

In Hypothesis 8, we predicted that the transformational style of the supervisor perceived by the partner would moderate the crossover of job crafting. The interaction between actor’s seeking challenges and the transformational style of the supervisor on partner’s seeking challenges was significant \((t = -2.61, p < .01; \text{see Table } 5)\).

| Table 5. Multi-level Estimates for Model 3 Predicting Day-level Seeking Challenges Partner, Moderated by Transformational Leadership \((N = 65 \text{ dyads}, N = 130 \text{ persons}, N = 390 \text{ data points})\) |
|---------------------------------|---------|---------|---------|
| Variable                       | Estimate| SE      | t       |
| Constant                       | 2.503   | 0.081   | 30.90 ***|
| Age partner                    | -0.016  | 0.007   | -2.29 *  |
| General-level seeking challenges partner | 0.280   | 0.088   | 3.18 **  |
| Day-level seeking challenges actor | 0.052   | 0.052   | 1.00     |
| Day-level seeking resources actor | 0.056   | 0.064   | 0.88     |
| Day-level reducing demands constructively actor | -0.016  | 0.056   | -0.29    |
| General-level transformational leadership partner | -0.108  | 0.082   | -1.32    |
| General-level transformational leadership partner x day-level seeking challenges actor | -0.141  | 0.054   | -2.61 **  |

\(-2^{\log (L)} = 919.671, \text{diff}^{-2^{\log (L)}} = 6.51^*\)  
\(df = 1\)

However, in contrast to our expectations, there was only a positive relationship between actor’s and partner’s seeking challenges when partners perceived their supervisor as low on transformational leadership (see Figure 6).
Furthermore, results did not support the interaction term on seeking resources ($t = -.72, ns$), and reducing demands constructively ($t = -.45, ns$). Therefore, Hypotheses 8a and 8c were rejected.

**Discussion**

The overall aim of the present study was to gain insight in the role of goal orientation and transformational leadership on job crafting behaviors, both at the individual as well as at the inter-individual level.

**Do goal orientation and transformational leadership matter?**

Consistent with our expectations, employees’ mastery-approach was positively related to seeking resources and reducing demands constructively. Mastery-approach orientated employees indeed proactively ask for feedback and advice from others, and they find ways of reducing their demands constructively by improving procedures. These findings support previous research on goal orientation which demonstrated that mastery-orientated employees
value feedback and proactively seek it, and that they demonstrate innovative job behaviors, because it helps them to develop themselves in their work (e.g., Janssen & van Yperen, 2004; Van de Walle et al., 2000). Furthermore, as predicted, these relationships were stronger than those of performance-approach, which was in fact unrelated to seeking resources and reducing demands constructively.

The unexpected finding that there was no relationship between performance-approach and seeking resources seems to support the ideas of Porath and Bateman (2006), who suggested that performance-oriented employees may be less interested in process feedback such as asking for advice about tasks. In addition, the finding that performance-approach was not related to reducing demands constructively may be explained by an underlying fear of failure (Elliot & McGregor, 2001). Performance-approach oriented employees might perceive the risk of failure as too high, since the chance of encountering obstacles is high (e.g., not everybody will agree with suggested changes; see also Tornau & Frese, 2013).

Surprisingly, no relationship between mastery-approach and seeking challenges was found, whereas performance-approach did show a positive association with this dimension. A possible explanation for these findings may be that performance-approach orientated employees strive to demonstrate their competence compared to others (Elliot & McGregor, 2001), and are suggested to demonstrate proactive behaviors to create a competitive advantage (Porath & Bateman, 2006). Employees who exhibit a performance-approach may therefore be less oriented on working together with others. Proactively asking for more responsibility and tasks may offer performance-approach oriented employees the opportunity to outperform others. On the contrary, mastery-approach oriented employees may be less active in seeking challenges which is a more individually focused behavior, because they are more interested in learning from others (Van de Walle et al., 2000; Elliot & McGregor, 2001), for example by seeking advice and working together with others to improve routines.
Furthermore, we predicted and found that transformational leadership was positively related to seeking resources and marginally positive to seeking challenges. Thus, transformational leaders indeed seem to encourage employees to seek advice and to take greater responsibility for their work. However, findings suggest that the relationship between transformational leadership and seeking resources is more complex. Specifically, we found a stronger positive relationship between transformational leadership and seeking resources when mastery-approach is low. This latter finding implies that a transformational leader may play a compensatory role when employees do not have the internal drive to seek for resources (see also Parker et al., 2010). It also seems to work the other way around, in that employees who exhibit a high mastery-approach may compensate a weak leader by finding the necessary resources themselves.

We did not find support for our prediction that transformational leadership would be positively related to reducing demands constructively. Our findings suggest that employees take the lead in changing hindering demands in a constructive way, regardless of their supervisor’s leadership style. A possible explanation may be that employees often do not involve their supervisor when changes are small, but that they are more likely to discuss this with their colleagues. Previous research showed that supervisors are often not aware of employees’ job crafting behaviors (Lyons, 2008). Additionally, employees may not always consult their supervisors as it may not be the changes in routines the supervisor had in mind, especially when changes are time consuming or threatening authority (Tornau & Frese, 2013).

**Do job crafting behaviors cross over between colleagues?**

An important finding of the present study was that job crafting behaviors can transfer from one colleague to another. Our results supported the crossover of seeking resources and reducing demands constructively between colleagues on a daily basis. Thus, when employees
observe their direct colleague asking for feedback or improving procedures, they are likely to show similar proactive behaviors. This is in line with previous research which demonstrated that job crafting behaviors may cross over between colleagues (Sanz-Vergel, 2014), and from the team to the individual (Tims et al., 2013b). The present findings are in agreement with social learning theory (Bandura, 1977), which states that most learning takes place through observing and modeling the behavior of others. By observing colleagues crafting their jobs, employees learn which behaviors are appropriate and rewarded at work (see also Tims et al., 2013b).

Contrary to the study (Arts et al., 2014) we replicated, we did not find a direct effect of seeking challenges of the actor on partner’s seeking challenges. The reason for this is not clear but it may have something to do with the fact that, in the present study, the level of seeking challenges was relatively high. This finding may be due to the overrepresentation of employees from retail organizations, where employees often work in a dynamic work environment which requires a high level of proactivity. Thus, employees already seem to take up extra tasks and responsibilities without modeling the behavior of their colleague. This line of reasoning is further strengthened by the rather counterintuitive finding that seeking challenges did cross over between colleagues when the partner perceived the supervisor as a low transformational leader. Transformational leaders are known for encouraging their subordinates to take greater responsibility and accomplish challenging tasks (De Hoogh et al., 2004; Strauss et al., 2009). It may be possible that when employees perceive their supervisor as transformational, they already take up challenges in collaboration with their supervisor. On the contrary, when transformational leadership is low, there is room for extra responsibilities and employees therefore seek challenges by modeling their colleague’s behavior.

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1 see also the positive relationship between transformational leadership and seeking challenges at the individual level
However, a transformational leader did not seem to influence the crossover of resources and reducing demands constructively between colleagues. A possible explanation for this may be that the crossover process of resources and improving routines is, in the first place, about working together with colleagues. Nowadays employees are more used to working in teams and monitor tasks together (Bolman & Deal, 2008). Thus, observing colleagues and imitating them may be part of the job, regardless of how one perceives one’s leader.

Furthermore, we predicted and found that a mastery-approach facilitated the crossover process in that reducing demands constructively crossed over from actor to partner, particularly when the partner scored high on mastery-approach. Our findings are consistent with previous research (e.g., Elliot & McGregor, 2001), which asserts that mastery-approach oriented individuals strive to develop themselves by extending their skills and increasing their knowledge. Reducing demands constructively is by its nature a proactive behavior which offers great learning opportunities, because changing procedures often involves working together with colleagues and learning from them, and persisting in the face of obstacles. Since mastery-approach oriented employees focus on learning and actively seek the help of others (Van de Walle, 2000), it is likely their approach gives an extra boost to the crossover of reducing demands constructively.

Mastery-approach did not positively influence the crossover of seeking resources, which indicated that employees model the seeking resources of their colleague regardless of their mastery-approach. A possible explanation for this could be that employees may also model their colleague’s behavior because asking each other for advice is needed (e.g., high interdependence tasks), without having the underlying goal of developing themselves (i.e., mastery-approach). In addition, this finding suggests that other individual differences may be more important in the facilitation of the crossover of resources. For example, Arts and
colleagues (2014) showed that the crossover of seeking resources took place when the empathy of the partner was high.

Unexpectedly, performance-approach did not facilitate the crossover process of job crafting behaviors. This might be explained by the focus of performance-approach oriented employees on their competence compared to others (Elliot & McGregor, 2001). Their goal may therefore be more focused on outperforming others, which is likely not to stimulate the crossover of job crafting and may even be damaging to the relationship between colleagues. For example, previous research showed that performance-approach goals may lead to more interpersonally harmful behaviors such as giving less accurate information to others (Poortvliet, Anseel, Janssen, Van Yperen, & Van de Vliert, 2012).

**Limitations and future research directions**

Several limitations of the present study should be noticed. Firstly, our sample was relatively small for the conducted statistical analyses, which did not allow the testing of latent variables and their indicators in the structural equation analyses (Kenny, 2014). Secondly, the diary study was conducted over a limited number of days, while in diary research often more days are included (e.g., Petrou et al., 2012). Therefore, our diary study may have been less accurate in capturing the daily fluctuations in job crafting behaviors. Thirdly, the Cronbach’s alpha for seeking resources at the general-level was relatively low. Therefore, it is recommended that future research includes all six items of the original scale (Petrou et al., 2012), which has a better reliability. However, since we used general-level seeking resources only as a control variable for the hypotheses on the crossover process, this did not affect the latter results greatly. Fourthly, employees from retail organizations were overrepresented, which affects the generalizability of our findings to other employees. Lastly, since our study was conducted cross-sectionally no causal inferences can be drawn.
Despite these limitations, we believe our study points to some interesting future lines of research. Firstly, although we have speculated that social norms play an important role in the crossover of job crafting, we did not examine this. Social norms within teams or organizations may be a powerful determinant of employees’ proactive behavior (see also Parker et al., 2010). Future research should examine to what extent social norms for proactive behavior influence employees’ job crafting and its crossover between colleagues. Secondly, our study provided evidence for the validity of a new job crafting dimension (i.e., reducing demands constructively), which includes proactive behaviors such as improving work procedures. Further research is required to establish the robustness of our findings, for example by examining its relationship with work engagement and burnout. Finally, future research is needed to establish the generalizability of our findings by examining the validity of the models using larger and more heterogeneous samples.

**Practical implications**

By showing that goal orientation and transformational leadership matter, the present study provides some interesting insights in how job crafting might be stimulated. Our study indicates that especially a mastery-approach increases employees’ job crafting behaviors. In some cases, a mastery-approach may even compensate a poor leader. Whereas a performance-approach does not seem to facilitate the crossover of job crafting between colleagues, a mastery-approach seems to boost it. An important goal for supervisors is therefore to encourage the adaptation of mastery-approach goals by providing a safe learning climate, and focusing on improving oneself instead of outperforming others (see also Van Yperen, Blaga, & Postmes, 2014a). Additionally, seeking challenges as part of the learning process should be stimulated.

Although job crafting is in the first place self-initiated behavior and a bottom-up strategy (Tim & Bakker, 2010), our study supports the notion that supervisors may indeed
encourage it (e.g., Parker et al., 2010). Results suggest that transformational leadership may not only stimulate employees to seek resources and seek challenges, but that a transformational leader may even compensate a lack of internal drive to seek for resources. Thus, attracting and supporting transformational managers may be an effective way for organizations to increase job crafting among employees.

Furthermore, our results suggest that job crafting behaviors cross over between colleagues. This seems to be good news for organizations, since working in proactive teams is becoming increasingly important to face the challenges of today's business world. However, in some cases there may be a negative outcome when employees model the behavior of their colleague who hardly shows any job crafting behaviors. Therefore, it is important for supervisors to stay alert to situations where employees take on their colleagues’ potentially counterproductive behavior, and to be prepared to intervene if necessary.

**Conclusion**
The present study clearly showed the importance of goal orientation and transformational leadership for employees’ job crafting behaviors, thereby providing answers as to why some employees craft more than others. We demonstrated that different goal orientations can indeed have differential behavioral consequences (see also Elliot & McGregor, 2001). Whereas a mastery-approach seems to increase employees’ seeking resources and reducing demands constructively, a performance-approach seems to heighten employees’ seeking challenges. In addition, our study demonstrated the importance of leadership, especially, at the individual level. Results suggest that a transformational leader may not only stimulate employees to seek resources and challenges, but may even compensate a subordinates’ lack of internal drive to seek for resources. Furthermore, our study provided evidence for the crossover of job crafting behaviors between colleagues, and showed that a mastery-approach may facilitate the crossover of reducing demands constructively. Overall, our study suggest that encouraging
employees’ mastery-approach and attracting transformational leaders might be effective ways to stimulate a proactive workforce, which is ready to face the challenges of today and the future.
References


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Appendix A

General questionnaire: General-level job crafting

All items were answered on a 5-point Likert scale ranging from 1 = never to 5 = always.

Seeking resources

I ask others for feedback on my job performance.

I ask colleagues for advice.

I ask my supervisor for advice.

I try to learn new things at work.

Seeking challenges

I ask for more tasks if I finish my work.

I ask for more responsibilities.

I ask for more odd jobs.

Reducing demands constructively

I simplify work processes or procedures to make my job easier.

I come up with solutions to accomplish my work in an easier way.

I improve working routines or procedures to make my job easier.

I always look for ways to do my work more efficiently.

If work processes or procedures delay my work, I will try to change them.
General-level goal orientation

All items were answered on a 6-point Likert rating scale (1 = strongly disagree, 6 = strongly agree).

Mastery-approach

I want to learn as much as possible from my work.

It is important for me to understand the content of my job as thoroughly as possible.

I desire to completely master my work.

Performance-approach

It is important for me to do better than colleagues.

It is important for me to do well compared to others at work.

My goal at work is to get a better evaluation than my colleagues.

General-level transformational leadership

All items were answered on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree).

My supervisor....

...stimulates subordinates to think independently.

...involves subordinates in decisions that affect their job.

...encourages subordinates to develop their full potential.

...is able to enthuse others for his/her plans.

...talks with subordinates about issues which are important for them.

...has a clear vision and an image of the future.

...stimulates subordinates to see problems in another light.

...delegates challenging responsibilities to his/her subordinates.

...shows that he/she believes in his/her ideals, ideas, and values.
Diary questionnaire: Day-level job crafting

All day-level items were answered on a 5-point Likert scale, ranging from to 1 = totally does not apply to me, to 5 = totally applies to me.

Seeking resources

Today….

…I have asked others for feedback on my job performance.
…I have asked colleagues for advice.
…I have asked my supervisor for advice.
…I have tried to learn new things at work.

Seeking challenges

Today….

…I have asked for more tasks when I finished my work.
…I have asked for more responsibilities.
…I have asked for more odd jobs.

Reducing demands constructively

Today….

…I have simplified work processes or procedures to make my job easier.
…I have come up with solutions to accomplish my work in an easier way.
…I have improved working routines or procedures to make my job easier.
…I have looked for ways to do my work more efficiently.
…I have changed work processes or procedures which delayed my work.