


What happens at work does not always stay at work: Daily job crafting and detachment among colleagues

Ana Isabel Sanz-Vergel¹  | Karina Nielsen² |
Alfredo Rodríguez-Muñoz³ | Mirko Antino³

¹Norwich Business School, University of East Anglia, Norwich, UK

²Institute of Work Psychology, Sheffield University Management School, University of Sheffield, Sheffield, UK

³Facultad de Psicología, Universidad Complutense de Madrid, Campus de Somosaguas, Madrid, Spain

Correspondence

Ana Isabel Sanz-Vergel, Norwich Business School, University of East Anglia, Norwich Research Park, Norwich, Norfolk NR4 7TJ, UK.
Email: a.sanz-vergel@uea.ac.uk

Abstract

Through job crafting, employees proactively change or modify their tasks, thus reducing adverse job demands or protecting resources. There is still a lack of understanding of the impact that job crafting may have on colleagues at work (crossover effect), and how this may affect their ability to disconnect from work (spillover effect). In the present daily diary study, we examine these two processes among 82 dyads of colleagues ($N = 164$ employees) over five consecutive working days ($N = 820$ observations). We found a number of crossover and differential spillover effects. For example, when the focal employee starts new challenging projects, their colleague reacts by reducing the number of stressful tasks. This, in turn, affects psychological detachment from work. Specifically, whereas increasing challenging demands hinders daily detachment, decreasing hindering demands facilitates it. Taken together, these findings demonstrate that the impact of job crafting goes beyond the focal employee and beyond the work domain.

KEYWORDS

colleagues, crossover, job crafting, psychological detachment, spillover

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *Applied Psychology* published by John Wiley & Sons Ltd on behalf of International Association of Applied Psychology.

INTRODUCTION

Job crafting has been defined as “the physical and cognitive changes individuals make in the task or relational boundaries of their work” (Wrzesniewski & Dutton, 2001, p. 179). Through job crafting, individuals may balance their job demands and job resources with their abilities and needs (Tims & Bakker, 2010). So far, different studies have shown that job crafting is beneficial for employees’ work-related well-being and performance (Bakker et al., 2012; Robledo et al., 2019; Tims et al., 2015). Job crafting also alters the work environment and affects others (Leana et al., 2009), but there is still scarce empirical evidence for the impact of this behavior on colleagues (Peeters et al., 2016; Tims et al., 2015), and specifically, we still do not understand whether colleagues respond to specific job crafting behaviors by just copying the same behavior (Bakker et al., 2015) or by using different combinations of job crafting behaviors. Another avenue of research that deserves attention is how job crafting may affect employees outside work. In one of the most recent meta-analyses on job crafting, Wang et al. (2020) categorize the outcomes of job crafting in four aspects that exclusively relate to well-being *at work* (i.e., thriving, affective commitment, job satisfaction, and organizational identification). This shows that despite the surge of studies on this topic over the last years, little attention has been paid to how job crafting affects employees beyond the work domain (Shi et al., 2022). To gain a deeper understanding of the crossover and spillover effects of job crafting, in this daily diary study, we examine whether job crafting crosses over between co-workers and affects employees outside work, and more specifically, we focus on a key indicator of recovery from work-related stress: Psychological detachment from work. This core recovery experience has been defined as “an individual’s sense of being away from the work situation” (Etzion et al., 1998, p. 579). Scholars so far have assumed that (lack of) psychological detachment depends either on employees’ perceptions of work demands (Sonnentag & Bayer, 2005) or on their spouse’s level of recovery (Hahn & Dormann, 2013), without considering that actively modifying job demands and resources at work may also have an impact on employees’ recovery experiences. This study could help identify sustainable job crafting behaviors that do not jeopardize daily employees’ recovery outside work.

Literature on job crafting has been classified under the “original theory” perspective or the “job demands–resources” perspective (see Tims et al., 2021 for an integrative review). The original theory perspective, led by Wrzesniewski and Dutton (2001), considered that employees crafted their role by changing their cognitions about the job (cognitive crafting), the relationships with others at work (relational crafting), or the number, scope, or type of job tasks done at work (task crafting). The objective is to improve meaning and work identity. The job demands–resources perspective, led by Tims et al. (2012), considers that employees craft their jobs by either increasing their resources or by decreasing their demands. The objective is to balance job resources and demands so as to achieve person–job fit. In our study, we follow this second approach as we operationalize job crafting as increasing resources and decreasing demands. This is the most commonly followed perspective among studies on the crossover of job crafting (e.g., Bakker et al., 2015; Peeters et al., 2016) and diary studies on this field (e.g., Demerouti et al., 2015; Tims et al., 2014).

With the present study, we contribute to research on job crafting and recovery in four novel ways. First, we add to the body of studies examining crossover effects by analyzing different forms in which colleagues can react to the focal employee’s job crafting beyond just imitating the same job crafting behavior. Therefore, unlike other studies exclusively focused on crossover via observation (e.g., Peeters et al., 2016), we propose that colleagues are also proactive in their

own way and may initiate different forms of job crafting behaviors in response to the employee's crafting. Second, we explore how these crossover effects impact on colleagues' non-working lives, which has been a neglected area of study (Zito et al., 2019). We examine spillover effects, that is, the transmission of behaviors and moods from work to home (Edwards & Rothbard, 2000), and analyze how job crafting relates to recovery outside the work domain (i.e., psychological detachment from work). By doing so, we extend knowledge on the job crafting field, which is mainly focused on the impact of this phenomenon on work-related well-being indicators such as work engagement (e.g., Tims et al., 2015) or burnout (e.g., Petrou et al., 2015). There has been an attempt to link job crafting to the recovery literature but this still focuses on the work domain. Specifically, Shi et al. (2021) found that job crafting is related to *internal* recovery (operationalized as high vigor and low fatigue). In their daily diary study, job crafting, fatigue, and vigor were all measured at the end of the workday. We go one step further than Shi et al. by analyzing the impact of job crafting on psychological detachment, which is an indicator of *external* recovery (that is, recovery that occurs during non-work time). Third, although studies on recovery have identified job demands and resources as antecedents of psychological detachment (Sonnetag & Bayer, 2005; Sonnetag & Zijlstra, 2006), there is a lack of understanding of how proactively shaping these job characteristics may benefit/hinder recovery. Our study aims to show that employees can introduce changes in their environment and create opportunities to recover, but that not all job crafting strategies work in the same way and some of them may be more beneficial for recovery than others. Job crafting may be an important additional antecedent to consider in the study of recovery from work. Fourth, we aim to advance theory by integrating the Conservation of Resources (COR) Theory (Hobfoll, 1998) and the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007) with the job crafting and recovery literatures. We build a bridge between these two streams of research that may encourage scholars to pay more attention to the spillover effects of job crafting.

We employ a diary approach and collect data at two different points in time over five consecutive working days. This methodology is recommended to collect work and non-work experiences in individuals' natural life contexts (Ohly et al., 2010). Job crafting and recovery are fluctuating phenomena, so diary studies better capture this variation (Demerouti et al., 2015). By using this methodology, we also reduce the likelihood of retrospective recall bias. Specifically, we collect information on job crafting in the afternoon (immediately after work) and information about psychological detachment in the evening (before going to bed). We collect data not only from employees but also from their colleagues (in particular, dyads). We use a method of analysis known as the “Actor-Partner Interdependence Model” (APIM; Kenny et al., 2006). This strategy of analysis allows us to examine (a) how job crafting affects one's own recovery (*actor effects*) and (b) how it may affect colleagues (*partner effects*). The conceptual model of the study is depicted in Figure 1.

The JD-R's approach to job crafting

As previously stated, in this study, we follow Tims et al.'s (2012) conceptualization of job crafting, based on the JD-R model (Bakker & Demerouti, 2007). According to this model, job demands are aspects of the job that result in high levels of strain and reduced performance, whereas job resources have the capacity to generate work engagement and high performance. In subsequent applications of this model, Tims and Bakker (2010) pointed out that the existence

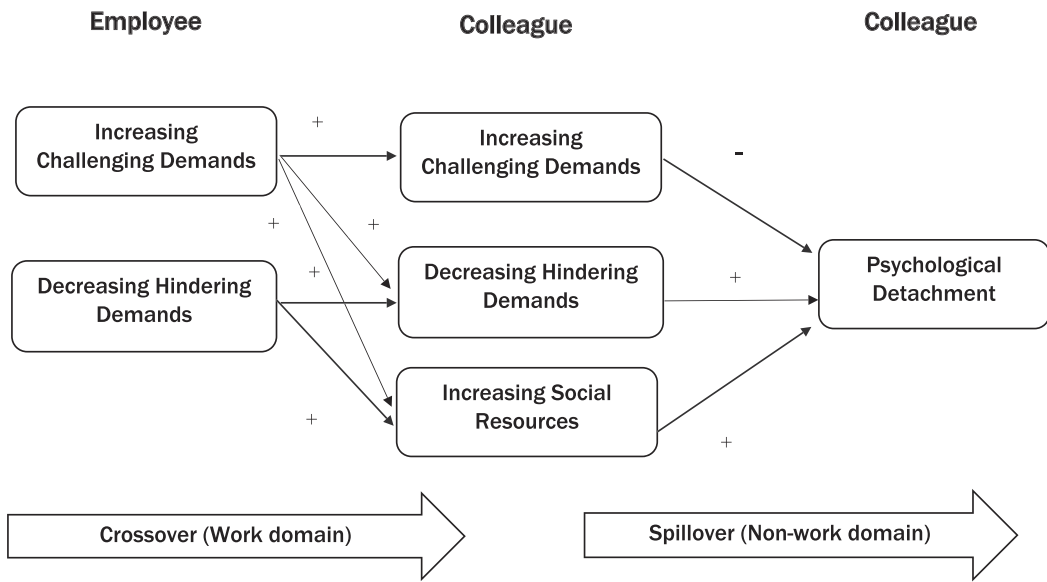


FIGURE 1 Conceptual model of the study.

of high job demands and low job resources generates a person-job misfit that may be counterbalanced by initiating job crafting behaviors. Based on this conceptualization, Tims et al. (2012) operationalized the concept of job crafting and proposed specific ways in which employees can craft their job. In this study, we focus on three key dimensions as defined by Tims et al.: Decreasing hindrance demands (i.e., making your job less intense), increasing challenging demands (e.g., starting new projects or stimulating tasks), and increasing social resources (e.g., asking for feedback or advice). These forms of job crafting are based on the three work characteristics typically categorized by Cavanaugh et al. (2000), namely, challenge demands, hindrance demands, and job resources.

Regarding the two types of demands, whereas hindrance demands clearly affect employees' well-being in a negative way, challenge demands generate motivation but at the same time consume energetic resources thereby leading to burnout (Van den Broeck et al., 2010). Because these two types of demands are different in nature, we anticipate that an increase in challenge demands and a reduction in hindrance demands will have a differential impact on psychological detachment. That is the reason why we use these two dimensions as independent variables. In addition, we examine increasing social job resources as a form of social support that may have benefits for colleague's well-being. Resources like social support are mainly mobilized in response to challenge and hindrance stressors (Schulz et al., 2019; Sonnentag & Fritz, 2015). As we follow a job demand–resource perspective, theoretically, we expect that colleagues will increase their social job resources to deal with the focal employee's increase of challenge demands/decrease of hindrance demands. Finally, although increasing structural job resources (i.e., developing capabilities and learning new things) might have been another way of dealing with the demands, Nielsen and Abildgaard (2012) found that mobilizing these resources is not easy in all contexts and happens more often among white-collar workers. In fact, they could not confirm the existence of this factor in the validation of their scale among blue-collar workers. As our study has employees from a variety of sectors (e.g., catering industry, education

sector, and health sector), we used Nielsen and Abildgaard's operationalization of job crafting, and therefore, increased structural job resources are not included here. We used the validated daily version of this measure, which has been tested in a variety of industries (Nielsen et al., 2017).

The crossover effects of job crafting

Most of the research on job crafting has focused on the individual as the only agent involved in the job crafting process, whereas research on the crossover of job crafting among colleagues is scarce (Peeters et al., 2016). The term crossover refers to the process by which psychological strain or well-being experienced by one person affects the level of strain or well-being of another person (Westman, 2001). Studies examining interpersonal processes show that job crafting is not merely an individual phenomenon and crosses over in the form of increased/reduced colleague's performance, burnout, or workload, among other outcomes. For example, Tims et al. (2013) found that job crafting at the team level was related to the team's overall performance and the individual's performance within the team. In a cross-sectional survey study, Tims et al. (2015) demonstrated that one individual's job crafting to decrease hindering job demands was related to higher workload and burnout of a colleague. More recently, Fong et al. (2022) showed that colleagues who observe avoidance crafting (e.g., decreasing hindering demands) report lower willingness to cooperate and higher conflict with the job crafter, whereas observing approach crafting behaviors (e.g., increasing social resources) generates higher willingness to cooperate and lower conflict with the job crafter.

The abovementioned studies show the impact of employees' job crafting on colleagues' behaviors or attitudes at work—but they do not show whether the phenomenon of job crafting itself crosses over among colleagues. In other words, do the focal employee's job crafting behaviors elicit colleague's job crafting behaviors? To the best of our knowledge, only two daily diary studies have answered this question by examining the direct crossover of job crafting behaviors among colleagues (Bakker et al., 2015; Peeters et al., 2016). These studies focus on “symmetric effects,” that is, the crossover of the same job crafting dimension, which usually occurs by copying the behavior via observation (Bandura, 1977). However, findings from these studies are inconclusive because whereas Bakker et al. (2015) found symmetric effects for all the job crafting dimensions, Peeters et al. (2016) only found a symmetric crossover effect for the seeking challenges dimension. A key issue with these studies is that they assume that employees will only copy the same behavior as if colleagues would not consider other forms of job crafting as a response. For that reason, there is still a lack of understanding on whether a specific employee's job crafting behavior may also elicit a different job crafting behavior from the colleague. This is what we call “asymmetric effects.” Employees cannot only observe and learn how to craft from their colleagues but can also anticipate how their colleagues' crafting behaviors may affect them and take action about that. COR theory (Hobfoll, 1998) may be an appropriate framework to explain how these effects take place. According to COR theory, stress arises when individuals feel their resources are threatened or when there is an actual loss of resources (e.g., energy and status). For that reason, individuals will protect their resource reservoirs or will mobilize this reservoir to ensure future resource gain. By applying COR theory to our study, we will explain the mechanisms through which colleagues will protect their resources in response to the focal employee's job crafting behaviors. Because employees protect or mobilize resources in a situation of potential resource loss, we are focusing our hypotheses on the two

types of demands that have been proved to generate resource loss—that is, challenge and hindrance demands (Van den Broeck et al., 2010).

Based on COR theory (Hobfoll, 1998), if an employee sees how their close colleague decreases hindering demands, they can anticipate a resource loss, that is, their workload may increase and they may lose valuable resources such as energy or time. This resource loss is demonstrated by Tims et al. (2015), who found that employees' decreasing hindering demands led to higher colleague's workload, which in turn, led to higher colleague's burnout. Although this study is key to understand the effects of job crafting on others, its results imply that the colleague is a passive recipient who will not respond to the focal employee's behavior—that is, they will just perceive how their workload increases and will allow the resource loss to occur without taking any action to protect their resources. To challenge this assumption, in our study, we propose that the colleague may also react proactively to the employee's job crafting behavior and may initiate their own job crafting behaviors to conserve or increase their resource reservoirs. A way of protecting their resources may be to reduce one's own hindering demands, that is, a symmetric effect (Bakker et al., 2015). By doing so, employees reduce the number of stressful tasks they attend to on a daily basis, which is a useful way of saving energy and time. This will allow them to prioritize instead of just assuming the work of the focal employee. In addition, colleagues may also increase their resource reservoirs by seeking out resources. In this respect, social support and feedback have been classic examples of job resources that help deal with excessive job demands (Bakker & Demerouti, 2007). Via this job crafting behavior, colleagues gain resources such as feedback—a resource that can be helpful to deal with any potential impact that the focal employee's behavior may have on them. Indeed, one of the main concerns of colleagues is whether the focal employee's job crafting behavior will impact negatively on them (Tims & Parker, 2020). In this respect, when the employee decreases hindering demands, it is important for the colleague to ask for feedback to peers and to the supervisor and ensure ways in which their performance can be protected.

Similarly, when the focal employee increases challenging demands (i.e., starting a new project), the colleague may feel that this will somehow affect them too and they may end up having to deal with that extra work, which, again, may be viewed as a potential resource loss. This may elicit other forms of job crafting in order to protect their resources and counterbalance the potential negative effects. As previously mentioned, one useful form can be the protective mechanism (decreasing hindering demands to avoid future resource loss). This will ensure a resource reservoir that may be needed to prioritize tasks if the colleague ends up involved in the new project initiated by the focal employee.

The second pathway is the mobilizing resources mechanism, in which the individual increases social resources to have extra support to deal with potential demands (Bakker & Demerouti, 2007). As previously mentioned, getting support and feedback on one's own performance is important as it is a way of reflecting on potential ways in which job demands and resources can be better balanced. Finally, another option could be that colleagues initiated new challenges themselves, as they may observe the positive outcomes associated with it (i.e., extra motivation). Indeed, Peeters et al. (2016) found a direct crossover of seeking challenges among colleagues. Taken together, based on COR theory (Hobfoll, 1998), we propose the following symmetric and asymmetric effects of job crafting:

Hypothesis 1. Employee's day-level decreasing hindering demands will be positively related to (a) colleague's day-level decreasing hindering demands and (b) day-level increasing social resources.

Hypothesis 2. Employee's day-level increasing challenging demands will be positively related to (a) colleague's day-level increasing challenging demands, (b) day-level decreasing hindering demands, and (c) day-level increasing social resources.

Spillover effects of job crafting

Recovery is an important process because as Sonnentag and Fritz (2007) pointed out, it is opposite to the building up of stress and helps the psycho-physiological systems re-establish. The core dimension representing recovery is psychological detachment, defined as "an individual's sense of being away from the work situation" (Etzion et al., 1998, p. 579). It implies not thinking about one's work and job-related problems (Sonnentag & Bayer, 2005). Knowing how job crafting affects employees outside work may help design sustainable jobs aimed at increasing performance at the same time as promoting employees' recovery from stress. In this study, we explore the impact of three job crafting dimensions on the ability to detach from work. In doing so, we respond to Tims et al.'s (2021) call to gain a deeper understanding of the differential effects of job crafting behaviors and Zito et al.'s (2019) call to zoom in into the effects of job crafting outside the work domain.

We base our proposition on integrations of the JD-R model with the recovery literature (e.g., Demerouti et al., 2009). This integration posits that under high levels of job demands, employees find it difficult to detach from work because of elevated cognitive activation. However, high levels of resources do not generate a stressful response, thereby facilitating recovery (Kinnunen et al., 2011). The level of activation that each type of demand (challenge vs. hindrance) may elicit is different. This assumption is empirically tested in Bennett et al.'s (2018) meta-analysis. The authors found that challenge demands are negatively related to psychological detachment, whereas hindrance demands are positively related to this recovery experience. In the context of job crafting, this means that individuals have the opportunity to proactively increase/reduce demands—but it is important to identify in which cases this proactive behavior may hinder or facilitate recovery. For example, given the potential that challenging demands have to foster work motivation and engagement on a daily basis (Tadić Vujčić et al., 2017), employees may decide to increase them. However, after increasing challenging demands, the person may continue thinking about its implications (i.e., new project and the new associated tasks), which will hinder their psychological detachment (Bennett et al., 2018). Indeed, a low level of activation is difficult to achieve when employees are not able to bring work matters to closure (Sonnentag & Fritz, 2015). Based on this theorizing and previous evidence, we hypothesize that

Hypothesis 3a. On a daily basis, colleague's increasing challenging demands during the working day will be negatively related to their own psychological detachment in the evening.

Decreasing hindering demands is an interesting form of job crafting that has yielded inconclusive results. Petrou et al. (2015) found that decreasing hindering demands was related to higher levels of exhaustion after work because individuals simply postpone having to do undesirable tasks. Robledo et al. (2019) proved that it was negatively related to work engagement and job satisfaction. However, not all studies have found the same negative effects. For example, Demerouti et al. (2017) provided evidence that reducing demands was beneficial for

adaptive performance. Therefore, decreasing hindering demands may also have beneficial effects, but these have not been sufficiently explored yet (Zito et al., 2019). In this study, we propose that this form of job crafting will have a positive impact *outside work* and, more specifically, on the ability to detach from work. We argue that through reducing the number of stressful tasks, employees are able to manage their energy levels because they focus their efforts only on core tasks, so it can be a strategy to reduce immediate stress (Tims et al., 2013). There is evidence that hindrance demands lead to problems to disconnect (Bennett et al., 2018; Sonnentag & Fritz, 2007), whereas a reduction of job stressors is linked to a lowered stress response that facilitates recovery (Sonnentag & Fritz, 2015). By no means are we suggesting that “avoiding” tasks is a sustainable or recommendable strategy in the long term, but if we find evidence that decreasing the number of stressful tasks is beneficial for daily detachment, it could be a helpful stress management strategy when employees are dealing with too many tasks on a particular day/week. Indeed, Bennett et al. (2018) call for more diary studies in order to disentangle how challenge and hindrance demands affect recovery from day to day. Based on these previous evidence and associated argumentation, we propose that

Hypothesis 3b. On a daily basis, colleague's decreasing hindering demands during the working day will be positively related to their own psychological detachment in the evening.

Finally, increasing social resources may facilitate recovery (Demerouti et al., 2009). In support of this assumption, different studies have shown how social resources foster recovery experiences outside work. For example, the possibility to receive adequate feedback about how to improve or change your performance helps individuals to reduce the tendency to worry about work-related issues (Bakker et al., 2005). Emotional social support is particularly helpful in calming down after work, increasing both detachment and relaxation (Sonnentag & Fritz, 2007). In our study, because we use the existing conceptualization of increasing social resources developed by Tims et al. (2012), we do not distinguish whether the social support is instrumental or emotional but refer to social support in general. Indeed, Sonnentag and Fritz (2015) suggest that when employees receive social support (overall), it is more likely that they disconnect from work because they rest assured that their colleagues will help them if/when needed. This idea has been empirically proven by Schulz et al. (2019), who found that employee's perception of co-worker support was positively related to psychological detachment from work. The question is whether *actively* looking for that support will also have the same benefits, and this is what we try to find out in our study. Based on the integrations of the JD-R model with the job crafting (Tims & Bakker, 2010) and recovery literatures (Demerouti et al., 2009), as well as on previous empirical evidence, we propose that

Hypothesis 3c. On a daily basis, colleague's increasing social resources during the working day will be positively related to their own psychological detachment in the evening.

Taking crossover and spillover effects together, we propose a final set of hypotheses about how employee's job crafting leads to colleague's detachment via a crossover effect:

Hypothesis 4a–b. Employee's day-level decreasing hindering demands will be positively related to colleague's day-level psychological detachment via (a) colleague's

day-level decreasing hindering demands and (b) colleague's day-level increasing social resources.

Hypothesis 4c. Employee's day-level increasing challenging demands will be negatively related to colleague's day-level psychological detachment via colleague's day-level increasing challenging demands.

Hypothesis 4d–e. Employee's day-level increasing challenging demands will be positively related to colleague's day-level psychological detachment via (d) colleague's day-level decreasing hindering demands and (e) colleague's day-level increasing social resources.

METHOD

Sample and procedure

We used a diary design and collected data among 82 dyads of colleagues ($N = 164$ employees) over five consecutive working days ($N = 820$). We collected data (pre-pandemic) from different professional backgrounds in order to have a variety of sectors represented in the study. In the final sample, most participants worked in the health and welfare sector (22.1%), followed by the catering industry (16%), the trade sector (13.6%), and the education sector (6.5%). Most employees in the sample were women (65.9%), the mean age of the participants was 41.33 years ($SD = 11.24$), and the majority of them were married with children (42.7%). On average, they worked 38.10 h per week ($SD = 8.03$), and the mean tenure was 19.2 years ($SD = 10.75$). Most participants held a university degree (66.5%).

This study is part of a large project on job crafting and well-being among colleagues, and several students were involved in the data collection. Student-recruited samples are common in organizational psychology, especially when the design is complex and involves multiple sources (Hochwarter, 2014). There is growing evidence that this method of data collection does not affect the results of the study (Wheeler et al., 2014). What is more, it may increase the possibility to attract a diverse sample enabling generalization (Demerouti & Rispens, 2014). We followed the recommendations by Demerouti and Rispens (2014) about how to ensure quality data among student-recruited samples. The first recommendation by these authors is to provide clear instructions to the students. We organized briefing sessions where we explained to the students what the objectives of the study were and the theoretical and methodological reasons why a diary study among colleagues was needed. This provides the student with learning opportunities as well as with a sense of control about what they are doing. Moreover, the research team monitored the recruitment process from the beginning, and students received specific training on how to select the sample, communicate the instructions to the participants, and remind them to fill in the questionnaires. Second, each student was told to approach around five dyads of colleagues, but they were not pushed to achieve a target as this could make them put pressure on potential participants, which, in turn, could affect the quality of the data. Third, once the data were collected, the research team together with the students went through the questionnaires to ensure both members of the dyad had participated and to double check that they had filled in both, the socio-demographic questionnaire and the diary booklet. Fourth, we examined the characteristics of the sample to ensure these were in the same line as other crossover studies in the area (e.g., Peeters

et al., 2016). The average age, percentage of male/female, types of sectors, and working hours per week were in the same line as other studies in the area and in the line of what we expected.

At the beginning of the research project, 250 survey packages were distributed. The survey packages contained a letter describing the purpose of the study and specific instructions to reinforce the verbal instructions provided by the research assistants. Participants had to fill in a general questionnaire with socio-demographic information, and after that, a daily questionnaire to be filled in after work and before going to bed, over five consecutive working days. Anonymity of all responses was assured. After excluding the questionnaires that were not completed over the five working days, we had 82 dyads of colleagues (response rate of 65.6%). A pre-requisite to participate in this study was that dyads of colleagues should interact frequently on a daily basis.

Measures

General questionnaire

Socio-demographic information included age, gender (1 = Male, 2 = Female), occupational sector, job tenure, work hours per week, education level (1 = Elementary, 2 = High School or similar, 3 = University), and marital status (1 = Married without children, 2 = Married with children, 3 = Single without children, 4 = Single with children, 5 = Other).

Diary questionnaire (afternoon measures)

Daily job crafting was assessed with the Job Crafting Scale developed by Nielsen and Abildgaard (2012) and validated in a daily setting (Nielsen et al., 2017). The scale has five dimensions: increasing challenging demands, increasing social job resources, decreasing hindering demands, decreasing social demands, and increasing quantitative demands. We followed a conservative approach and focused on the three first sub-dimensions as these have been widely used by scholars in the field and are the most relevant for the purposes of this study. We excluded the two other dimensions (i.e., decreasing social demands and increasing quantitative demands) as these have not been previously explored in the literature and its analysis is beyond the scope of our study.

Response categories were from 1 = *Never* to 5 = *Very often*. Sample items are “Today, when a new task came up, I signed up for it” (daily increasing challenging demands), “Today, I ensured that my work was least burdening/straining” (daily decreasing hindering job demands), and “Today, I asked for feedback on my performance from my colleagues” (daily increasing social job resources). The internal consistency (Cronbach’s alpha) varied depending on the day of measurement. Specifically, for increasing challenging demands, it ranged between .70 and .82, for decreasing hindering job demands between .84 and .91, and for increasing social job resources between .85 and .88.

Diary questionnaire (evening measure)

Daily psychological detachment was measured with three items from Sonnentag and Fritz’s (2007) Recovery Experience Questionnaire. Again, the items were adapted for this diary study.

Responses were given on a 6-point scale ranging from 1 = *not true at all* to 6 = *totally true*. An example of item is “During the evening I haven’t thought about my work at all.” Cronbach’s alpha for this subscale ranged between .90 and .94.

Strategy of analysis

Given that our dataset is composed of three levels, we conducted multilevel analysis with the MLwiN software (Rasbash et al., 2012). Specifically, we have days (Level 1; $N = 820$), nested in persons (Level 2; $N = 164$ participants), and nested in dyads (Level 3; $N = 82$). This type of analysis has been recommended when variables show enough variation at each level of analysis. To test this, we examined whether our variables exhibited sufficient between-dyad, between-person, and within-person variability. We calculated the intraclass correlations with the intercept-only model. ICC (1) is commonly referred to simply as the ICC in random coefficient models. As our conceptual model is composed of variables at the day-level of analysis, we are particularly interested in the variation shown at the within-person of analysis.

Results indicated that the three-level model explained a significant amount of variance at all levels. Specifically, for increasing challenging demands, 20.5% of the variance was attributable to between-dyad variations (Level 3), 43.1% to between-person variations (Level 2), and 36.4% to within-person variations (Level 1). For decreasing hindering demands, percentages were 13.6%, 43.7%, and 42.7% for levels 3, 2, and 1, respectively, and for increasing social resources, 34.8%, 32.9%, and 32.3%. Finally, for our dependent variable (psychological detachment from work), percentages were 14.3%, 34.9%, and 50.8%, respectively. According to Byrne (2011), when the values are larger than .10 and smaller than .90, there is a substantive amount of variance explained at each level of analysis, and therefore, a multilevel approach is justified. In our case, all variables showed enough variation at each level (including the within-person level, which is our main level of analysis).

As recommended by Ohly et al. (2010), day-level variables (job crafting dimensions and psychological detachment) are centered around the respect person mean and person-level variables (our control variables) are centered around the grand mean, that is, the sample mean. Specifically, in our study, this means that on days when participants report job crafting dimensions at higher levels than they do on average (i.e., compared with themselves), they report high/low levels of detachment. When a person-level variable (e.g., control variable: working hours per week) is related to a day-level variable, it means that when participants work more hours than the average of the sample, we expect they report lower levels of daily psychological detachment.

Moreover, we used the APIM to analyze our data (Kenny et al., 2006). This is the most appropriate method when data are collected from both members of a dyad. In these cases, data cannot be treated as independent from one another (Kashy & Kenny, 2000) and individuals cannot be considered as the unit of analysis because this would result in bias in significance testing (Kashy & Snyder, 1995). Indeed, there may be a higher risk of either Type I or Type II errors. APIM was specifically designed to deal with non-independence of data and to investigate dyadic effects. To estimate the APIM using a multilevel approach, the data set needs to be arranged as a pairwise data set. The pairwise structure is a combination of the individual and dyad structures in the sense that there is one record for each individual but both partners’ scores occur on each record as well (for an example of pairwise structure please, see Kenny et al. (2006). More specifically, in this file structure (sometimes called a double-entry structure), each individual is an observation (i.e., each individual has his or her own data record), and each

individual's outcome score is associated with both his or her own predictor scores and his or her partner's predictor scores. This allows examining how an individual's predictor variable simultaneously and independently relates to his or her own criterion variable (actor effect) and to his or her partner's criterion variable (partner effect). In our study, the crossover of job crafting refers to partner effects (that is, how employee's job crafting affects colleague's job crafting), whereas spillover effects refer to actor effects (that is, how colleague's job crafting affects their own psychological detachment).

Finally, we used the Monte Carlo method to assess the significance of the indirect effects. This method is used in situations where bootstrapping is not feasible, such as multilevel modeling (Preacher & Selig, 2012, p. 83). Specifically, the Monte Carlo method creates confidence intervals for indirect effects. The objective is to test a null hypothesis about the population mediation effect. If the null hypothesized value of $a*b$ (usually 0) falls outside the interval, the null hypothesis of no mediation is rejected.

RESULTS

Preliminary analyses

The means, standard deviations, and correlations are presented in Table 1. First, to ensure that daily variables in this study are distinct from each other, we conducted a series of multilevel confirmatory factor analyses using the R package “lavaan” (Rosseel, 2012). We ran four competing models (available upon request), and the results show that the four-factor model separating each measure presented an acceptable fit to the data ($CFI = .94$, $TLI = .91$, $RMSEA = .046$, $SRMR$ [within] = .05, $SRMR$ [between] = .12), and the other three models presented lower/unacceptable fits (Schreiber et al., 2006). By comparing the fit of the different models, the four-factor model presented a significantly better fit than the three-factor model ($\Delta\chi^2 = 99.16$, $\Delta df = 6$, $p < .001$), which presented a better fit than the two-factor model ($\Delta\chi^2 = 275.25$, $\Delta df = 4$, $p < .001$), that also presented a better fit than the one-factor model ($\Delta\chi^2 = 480.36$, $\Delta df = 2$, $p < .001$). Overall, those results indicate that all the measures used in this study are empirically distinguishable.

Hypotheses testing

Hypotheses 1 and 2 examined crossover effects (from employee to colleague) among the job crafting dimensions. Table 2 summarizes the findings. As expected, employee's day-level decreasing hindering demands was positively related to colleague's day-level increasing social resources ($\gamma = 0.058$, $SE = 0.028$, $t = 2.07$, $p < .05$). Contrary to our expectations, we found that employee's day-level decreasing hindering demands was also positively related to colleague's day-level increasing challenging demands ($\gamma = 0.109$, $SE = 0.031$, $t = 3.51$, $p < .001$). We did not find a symmetric effect. Regarding employee's day-level increasing challenging demands, it was positively related to colleague's day-level decreasing hindering demands ($\gamma = 0.131$, $SE = 0.040$, $t = 3.27$, $p < .001$) but not related to colleague's day-level increasing social resources. Again, we did not find a symmetric effect. Therefore, Hypotheses 1 and 2 were partially supported.

TABLE 1 Mean, Standard Deviations, and Correlations

Variable	M (SD)	1	2	3	4	5	6	7	8
1. Increasing challenging demands (employee)	3.30 (1.35)	---							
2. Decreasing hindering demands (employee)	3.89 (1.45)	.05	---						
3. Increasing social resources (employee)	2.10 (1.29)	.39**	.06	---					
4. Increasing challenging demands (colleague)	3.30 (1.35)	.21**	.14**	.19**	---				
5. Decreasing hindering demands (colleague)	3.89 (1.45)	.14**	.15**	.06	.04	---			
6. Increasing social resources (colleague)	2.10 (1.29)	.19**	.06	.36**	.39**	.06	---		
7. Psychological detachment (employee)	4.13 (1.49)	-.19**	.30**	-.05	-.00	.05	-.04	---	
8. Psychological detachment (colleague)	4.13 (1.49)	-.00	.05	-.04	-.19**	.30**	-.06	.16**	---

Note: All variables are day-level variables.

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

TABLE 2 Multilevel estimates for models predicting colleague's job crafting (partner effects).

Model 1	Increasing challenging demands (colleague)			Decreasing hindering demands (colleague)			Increasing social resources (colleague)		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	3.291	0.097	33.92***	3.885	0.101	38.46***	2.108	0.102	20.66***
Increasing challenging demands (employee)	0.029	0.036	0.80	0.131	0.040	3.27***	-0.004	0.032	-0.12
Decreasing hindering demands (employee)	0.109	0.031	3.51***	0.052	0.035	1.48	0.058	0.028	2.07*
Increasing social resources (employee)	0.007	0.039	0.17	0.054	0.044	1.22	0.034	0.036	0.94
-2 × log (lh)	2345.812			2556.873			2193.798		
Difference of -2 × log (with null model)	13.72**			16.75**			21.92***		
df	3			3			3		
Level 1 intercept variance (SE)	0.656 (0.036)			0.883 (0.049)			0.534 (0.030)		
Level 2 intercept variance (SE)	0.832 (0.151)			0.027 (0.188)			0.591 (0.109)		
Level 3 intercept variance (SE)	0.283 (0.141)			0.139 (0.149)			0.500 (0.143)		

Note: All variables are day-level variables.

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

Hypotheses 3a–3c examined spillover effects (impact of colleague's job crafting dimensions during the working day on their own level of psychological detachment during the evening). To test this set of hypotheses, we examined a series of nested models. We controlled for those demographics that showed significant relations with dependent variable. In the model predicting day-level psychological detachment from work (Table 3), we included the intercept as the only predictor in the null model. In Model 1, we included the person-level control variables (gender, marital status, and worked hours per week). In Model 2, we entered the day-level variables employee's increasing challenging demands, decreasing hindering demands, and increasing social resources. Finally, in Model 3, we included colleague's day-level job crafting dimensions. Please note these are all “actor effects” because they refer to the same person (Model 3 in Table 3, where colleague's day-level job crafting dimensions relate to colleague's day-level psychological detachment). Results showed that day-level increasing challenging demands was negatively related to own levels of psychological detachment in the evening ($\gamma = -0.144$, $SE = 0.044$, $t = -3.27$, $p < .001$), whereas day-level decreasing hindering demands was positively related to psychological detachment ($\gamma = 0.172$, $SE = 0.037$, $t = 4.64$, $p < .001$). However, day-level increasing social resources was not significantly related to our dependent variable ($t = 1.19$, ns). Thus, Hypotheses 3a and 3b were supported, whereas Hypothesis 3c was not supported.

Hypotheses 4a–e suggested indirect effects of employee's day-level increasing challenging demands and decreasing hindering resources on colleague's day-level psychological detachment via colleague's day-level job crafting dimensions. Indirect effects are a special form of intervening effects whereby the predictor and the dependent variable are not related directly, but they are indirectly related through significant relationships with a linking mechanism (Mathieu & Taylor, 2006). As previously mentioned in their respective sections, employee's day-level increasing challenging demands was related to colleague's day-level decreasing hindering demands, and, in turn, colleague's day-level decreasing hindering demands positively related to own levels of detachment during the evening. The Monte Carlo test showed that this indirect effect was significant, because the bias-corrected 95% confidence interval did not include zero (lower bound [LB] = .01, upper bound [UB] = .04).

Moreover, although we did not have a specific hypothesis for this link, we found that employee's day-level decreasing hindering demands was positively related to colleague's day-level increasing challenging demands, which in turn related negatively to own levels of psychological detachment during the evening. The Monte Carlo test showed that this indirect effect was also significant, because the bias-corrected 95% confidence interval did not include zero (lower bound [LB] = $-.02$, upper bound [UB] = $-.006$). Finally, although employee's decreasing day-level hindering demands was positively related to colleague's day-level increasing social resources, this in turn did not relate to colleague's detachment, so there is no indirect effect here. Taking all these findings together, this means that Hypotheses 4a, b, c, and e were rejected, whereas Hypothesis 4d was supported. We also found an indirect effect that was not expected. For clarity purposes, the indirect effects are depicted in Figure 2.

DISCUSSION

Drawing on COR theory and integrations of the JD-R model with job crafting (Tims & Bakker, 2010) and recovery literatures (e.g., Demerouti et al., 2009; Kinnunen et al., 2011), we explored crossover and spillover effects of job crafting on a daily basis. Our first contribution

TABLE 3 Multilevel estimates for models predicting colleague's psychological detachment from work (actor and partner effects).

Variable	Null model			Model 1			Model 2			Model 3		
	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t	Estimate	SE	t
Intercept	4.129	0.100	41.2***	4.148	0.097	42.7***	4.153	0.102	41.5***	4.192	0.090	46.5***
Gender				0.280	0.193	1.45	0.246	0.195	1.26	0.315	0.179	1.75
Worked hours per week				-0.014	0.012	-1.16	-0.015	0.012	-1.25	-0.012	0.011	-1.09
Marital status				0.150	0.094	1.59	0.155	0.094	1.64	0.149	0.088	1.69
Increasing Challenging Demands, employee							0.092	0.044	2.09*	0.061	0.043	1.41
Decreasing Hindering Demands, employee							-0.073	0.038	-1.92	-0.051	0.037	-1.37
Increasing Social Resources, employee							-0.048	0.048	-1.00	-0.059	0.047	-1.25
Increasing Challenging Demands, colleague										-0.144	0.044	-3.27***
Decreasing Hindering Demands, colleague										0.172	0.037	4.64***
Increasing Social Resources, colleague										0.056	0.047	1.19
-2 X Log (lh)	2706.684			2614.503			2606.773			2577.097		
Difference of -2 X Log				92.181***			7.73*			29.67***		
df				3			3			3		
Level 1 intercept variance (SE)	1.123 (0.062)			1.095 (0.061)			1.079 (0.060)			1.073 (0.060)		
Level 2 intercept variance (SE)	0.771 (0.156)			0.730 (0.151)			0.659 (0.139)			0.603 (0.130)		
Level 3 intercept variance (SE)	0.317 (0.149)			0.278 (0.141)			0.397 (0.149)			0.237 (0.121)		

Note: Control variables are person-level variables, and job crafting dimensions and psychological detachment are day-level variables. Results remained the same when the control variables were excluded from the models.

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

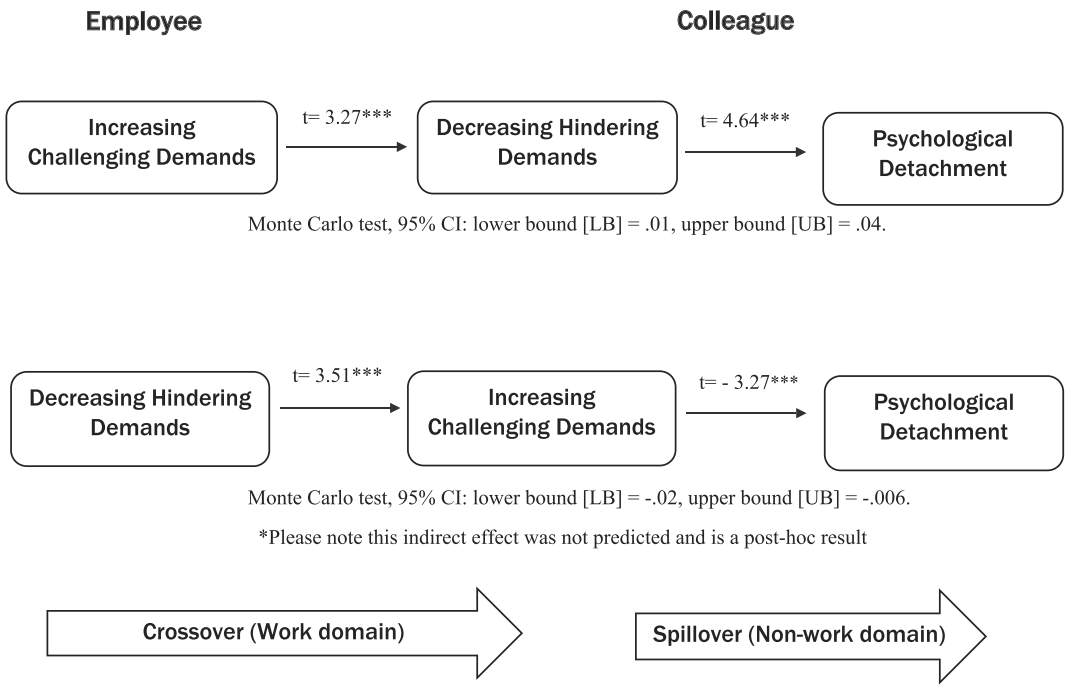


FIGURE 2 Illustration of the indirect effects.

relates to the crossover effects. Our study is the first to demonstrate the asymmetric effects of the job crafting dimensions, which sheds light on the crossover process. Previous studies in the area assumed that (a) employees copy the exact same job crafting behavior that they observe in their colleagues (Bakker et al., 2015; Peeters et al., 2016) or (b) they passively see how their workload increases (Tims et al., 2015). In our study, we demonstrate that colleagues can actively react to employees' job crafting by trying to adjust their own demands and resources in anticipation of what may happen next. Therefore, we contribute to the literature on job crafting by showing the active role that others play in the job crafting process.

As expected, and in line with COR theory (Hobfoll, 1998), when an employee decides to increase challenging demands on a particular day, their colleague reacts by reducing hindering demands as a way to protect their resources. In anticipation of possible loss of resources due to increased workload (Tims et al., 2015), individuals mainly focus on the reduction of existing tasks, which in turn helps them disconnect from work. Interestingly, decreasing hindering demands is the main strategy that colleagues use on a daily basis to react to this situation—they do not increase their own challenge demands or their social resources. Another interesting finding relates to how the colleague reacts to employee's day-level decreasing hindering demands. Unlike Bakker et al. (2015), we did not find a symmetric crossover effect of this dimension, that is, the fact that the focal employee reduces their stressful tasks does not mean that their colleague will do the same. Scholars in the field of job crafting have alerted of the potential problems that decreasing hindering demands may have on the relationship between colleagues, given that it leads to an increase in colleague's workload and higher level of conflicts (Tims et al., 2015). In our study, we found that on a daily basis, the way in which colleagues react is much more sustainable—they focus on ensuring future resource gains by increasing their social

resources (e.g., looking for feedback or advice from another colleague or from the supervisor in order to find a solution). This is a healthier way of approaching the situation, and recent studies have shown that approaching job crafting behaviors such as increasing social resources actually translates into higher willingness to cooperate and lower conflict with colleagues (Fong et al., 2022). Finally, an intriguing (and unexpected) result that deserves attention is the positive relationship between employee's day-level decreasing hindering demands and colleague's day-level increasing challenging demands. A possible explanation is that when the employee reduces the number of stressful tasks, this may translate into a challenge for the colleague, who perceives the situation as an opportunity to gain new resources (e.g., extra motivation). It could also mean that because colleagues fear that the employee's unwanted tasks land on themselves, they decide to start new different projects on their own. This, as we saw earlier, has a negative impact on recovery during leisure time. Therefore, other strategies such as increasing social resources could be more helpful in terms of achieving adequate psychological detachment from work.

Taking these crossover effects together, what our study demonstrates is that colleagues do indeed pick up on employees' job crafting behaviors but instead of copying the same behavior, they find their own way to craft to adjust to the situation by protecting their resource reservoirs or by generating new resources. Specifically, this crossover occurs on a daily basis. As Tims et al. (2014) point out, job crafting is a phenomenon subject to substantial intraindividual variation over time. So far, only Peeters et al. (2016) have focused on the daily crossover of job crafting but only examined symmetric effects. Our study makes a significant contribution to understanding daily dynamics of this work-related phenomenon and its impact among colleagues.

With our study, we also shed light on the spillover effects of job crafting. We aimed to understand which ways of responding to colleagues' job crafting are helpful and which ones are detrimental to one's own daily recovery from work. In doing so, we responded to three calls made by scholars: Zito et al. (2019) call for more studies on the effects of job crafting outside the work domain, Tims et al.'s (2021) call for an analysis of the differential impact of job crafting dimensions, and Bennett et al.'s (2018) call for a within-person examination of the impact of challenge and hindrance demands on psychological detachment from work. Again, the diary daily approach is the most appropriate when trying to respond to these calls for spillover and within-person effects. Indeed, most of the studies on recovery recommend following a diary approach to capture the spillover (e.g., Ohly et al., 2010). Through a diary daily study, we can see how job crafting performed during the working day has an impact on psychological detachment on the very same day (in the evening). With a different approach, the spillover effect could not be properly captured.

Overall, our results show that not all dimensions of job crafting are beneficial for daily recovery during non-work hours. Zooming in into our findings, as we hypothesized, increasing challenging demands during the working day leads the person to remain cognitively activated during the evening. When employees start new projects or tasks, they continue thinking about how they will perform them, and therefore they remain occupied and do not disconnect from work. This is in line with Sonnentag and Fritz (2007), who suggested that resources such as job control may be positive, but at the same, it implies the possibility and the necessity to make decisions, which may impair recovery off the job. It is worth mentioning that this may not be necessarily negative, as the person may be thinking of positive aspects of the work (Fritz & Sonnentag, 2005; Ilies et al., 2011). The question is whether prolonging this situation in time is positive for people's well-being. For example, Akkermans and Tims (2017) found that the

expansive job crafting dimensions (increasing demands and resources) had positive effects on work–family enrichment but, at the same time, increased work–family interference. This is in line with Zito et al. (2019), who also found that all the increasing dimensions led to higher work–family interference. We encourage scholars to continue exploring spillover effects of job crafting, as it seems clear that it affects employees beyond the work domain.

Also, as we expected, by reducing the number of stressors, employees achieve a low level of psycho-physiological activation, which makes psychological detachment more likely (Sonnentag & Fritz, 2015). Previous studies have yielded mixed results regarding the role of decreasing hindering demands, suggesting that this job crafting behavior reduces motivation and therefore affects work-related well-being (Petrou et al., 2012). However, Demerouti et al. (2017) provided evidence that reducing demands was beneficial for adaptive performance. These studies are all focused on work-related outcomes, so it is important to find out whether this dimension has the potential to help employees beyond the work setting. Indeed, Zito et al. (2019) suggested that future studies should explore the potential benefits that this dimension could have for employees outside the work domain and state as a limitation the fact that they did not include decreasing hindering demands in their study. We provide evidence that reducing hindering demands can be a form of self-protective job crafting, which results in benefits for recovery outside work. We call for more research on this dimension as it can be more beneficial than what scholars consider at the moment, and it may have important implications for theory and practice.

Finally, more research is needed to understand why increasing social resources during the working day does not directly impact on psychological detachment during the evening. One possible explanation may be that the type of social support is not specified. For example, one form of social support may be providing feedback. However, when the feedback confirms a negative aspect of oneself, it results threatening (Taylor & Brown, 1988). There is evidence that negative social feedback and ruminating about upsetting interpersonal events impact on depression (Nepon et al., 2011). Based on this, one could argue that under such circumstances, employees would be more likely to ruminate, impairing detachment. If, on the contrary, the feedback is positive, this could translate into positive work reflection outside work, which, as previously mentioned, is not compatible with psychological detachment because it means that employees are mentally connected to their jobs (Sonnentag et al., 2021).

What these studies show is that, overall, when employees increase social resources, no matter whether the feedback that they receive is positive or negative, they still need to work with the feedback, which may not help in their psychological detachment.

Another reason may relate to the operationalization of the concept. Increasing social resources is about looking for support, but the measurement of this dimension does not distinguish whether the support is instrumental or emotional. It has been recently found that emotional support from the colleague boosts the relationship between job crafting and work engagement, whereas instrumental support makes it weaker (Shin et al., 2020). As Schulz et al. (2019) suggest, it may be that each form of support is helpful under certain circumstances. Specifically, these authors suggest that instrumental support may be useful to deal with workload/time pressure and it will make the employee disconnect as they know they will be able to complete the task or meet a specific deadline, and emotional support could be more useful to deal with other type of stressors such as role ambiguity (e.g., venting about the difficulties and having a conversation about possible ways of dealing with it). The dark side of emotional support is that it may lead to co-rumination (Boren, 2013). Therefore, although looking for social support may be, in principle, good for detachment (Sonntag & Fritz, 2015), it would be important to

empirically test which type of support may be more helpful to disconnect and under which circumstances.

In sum, in our study, we advance the theory on job crafting by (a) showing that colleagues react proactively to employees' job crafting and not by just copying the same behavior, (b) adding to the incipient research on the spillover effects of job crafting, and (c) demonstrating that not all job crafting dimensions affect daily psychological detachment in the same way. We have shown that strategies that are traditionally considered positive for work-related outcomes (i.e., increasing challenging demands) can be detrimental outside work, and vice versa; strategies that were usually neglected because of negative effects on work-related outcomes (i.e., decreasing hindering demands) are beneficial for daily recovery. We also advance theory by integrating two streams of research under the umbrella of the JD-R model (Bakker & Demerouti, 2007). Previous studies have used this model to conceptualize job crafting (i.e., Tims & Bakker, 2010) and to explain how demands and resources affect the recovery process (Demerouti et al., 2009). However, ours is the first study to integrate both aspects. We show that employees can proactively modify their demands and resources in order to achieve a better recovery outside the work domain. Based on our findings, another potential path to incorporate in subsequent applications of the JD-R model could be the link between job crafting and recovery outside the work domain. Finally, COR theory can be applied to the job crafting literature and in particular to the crossover of job crafting, as we demonstrate that employees do not react passively to their colleague's job crafting. They take actions to maintain their resource reservoir and to ensure future resource gains.

Limitations and suggestions for future research

The present study has some limitations. First of all, all measures are self-reported, which may bring the problem of the common-method variance (CMV), that is, the variance that can be attributed to the measurement method rather than to the constructs the measures represent. CMV threatens the validity of the conclusions about the found relationships (Podsakoff et al., 2003). To minimize this potential problem, we took several precautions. As recommended by Bolger et al. (2003), we created a temporal separation, and respondents completed the questionnaire at two different points during the day (in the afternoon immediately after work and in the evening). Second, in the present study, we were interested in examining psychological detachment, a recovery experience that has been considered crucial in the recovery process (Sonnentag & Fritz, 2007). Other recovery experiences such as mastery experiences (e.g., learning a new hobby) could be explored in the future. Third, in this study, we explore short-term (daily) effects of job crafting. The impact of job crafting on recovery in the long term should be explored in future studies. The relationship between recovery and job crafting could also be reciprocal, in line with a recent study showing that the relationship between job crafting and well-being is quite complex (Hakanen et al., 2018). Fourth, as most of the studies on job crafting, we focus on an operationalization of job crafting based on the JD-R framework (Tims et al., 2012). As Oldham and Fried (2016) suggest, there may be other activities beyond this framework that could be captured in alternative measures of crafting. Moreover, we did not include structural job resources in the model but future studies could analyze its role in the crossover and spillover process. Nielsen and Abildgaard (2012) also propose interesting job crafting dimensions that scholars have not analyzed yet and that could also be considered (e.g., decreasing social demands).

Fifth, we did not explore profiles of job crafting (this was beyond our research objectives). However, we believe this would be an interesting avenue for future research. For example, in her study among Finnish rehabilitation workers, Mäkikangas (2018) found two profiles: active job crafters and passive job crafters. Active job crafters reported higher levels of work engagement than passive job crafters at both measurement times. Following up on this idea, it would be interesting to know whether different job crafting profiles would lead to higher or lower levels of psychological detachment from work over the course of several weeks.

Finally, in the present study, we zoom in into the daily dynamics between dyads of colleagues. We wanted to focus on how individuals reacted to the job crafting initiated by an employee with whom they had to interact frequently on a daily basis. This dyadic approach provides very specific information that helps disentangle complex work-related phenomena (Bakker & Xanthopoulou, 2009; Peeters et al., 2016). However, employees may also be affected by other colleagues at work, and therefore, the analysis of team dynamics would be another avenue for future research. For example, scholars could examine what happens when there are differences in the level of job crafting among the team members.

Practical implications

Our findings have important implications for practice. We demonstrate that job crafting crosses over among colleagues and, in turn, has an impact on individuals outside the work domain. Training work groups in collaborative job crafting (Leana et al., 2009) can be an efficient strategy to ensure that job crafting does not create difficulties for colleagues. Our study also shows that not all job crafting dimensions are equal, so training programs on how to do job crafting and under which conditions it is not beneficial could help employees avoid some of the potential negative effects. For example, the number of challenging tasks that may be accepted by an employee should be monitored in order to foster work engagement and motivation but, at the same time, to facilitate detachment. Mentoring and coaching should be offered to employees in order to select the most appropriate job crafting behaviors and increase recovery. The main objective is to design jobs that facilitate recovery opportunities (Sonnentag, 2003) and help employees re-design these jobs to make the most of them. Specific training on how to recover has also been found to be effective (Hahn et al., 2011). By combining these two aspects—appropriate job crafting and training on recovery—employees will be able to increase their well-being both at work and outside work.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are publicly available at 4TU.ResearchData (Doi: [10.4121/16766929](https://doi.org/10.4121/16766929)).

ETHICS STATEMENT

We obtained formal approval from the Deontological Ethics Committee of the Complutense University of Madrid, Spain (reference number 2016/17-010).

ORCID

Ana Isabel Sanz-Vergel  <https://orcid.org/0000-0002-1983-422X>

REFERENCES

- Akkermans, J., & Tims, M. (2017). Crafting your career: How career competencies relate to career success via job crafting. *Applied Psychology: An International Review*, 66(1), 168–195. <https://doi.org/10.1111/apps.12082>
- Bakker, A. B., & Demerouti, E. (2007). The job demands–resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., Demerouti, E., & Euwema, M. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10, 170–180. <https://doi.org/10.1037/1076-8998.10.2.170>
- Bakker, A. B., Rodríguez-Muñoz, A., & Sanz-Vergel, A. I. (2015). Modelling job crafting behaviors: Implications for work engagement. *Human Relations*, 69, 169–189. <https://doi.org/10.1177/0018726715581690>
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65, 1359–1378. <https://doi.org/10.1177/0018726712453471>
- Bakker, A. B., & Xanthopoulou, D. (2009). The crossover of daily work engagement: Test of an actor–partner interdependence model. *Journal of Applied Psychology*, 94, 1562–1571. <https://doi.org/10.1037/a0017525>
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bennett, A. A., Bakker, A. B., & Field, J. G. (2018). Recovery from work-related effort: A meta-analysis. *Journal of Organizational Behavior*, 39(3), 262–275. <https://doi.org/10.1002/job.2217>
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54, 579–616. <https://doi.org/10.1146/annurev.psych.54.101601.145030>
- Boren, J. P. (2013). Co-rumination partially mediates the relationship between social support and emotional exhaustion among graduate students. *Communication Quarterly*, 61, 253–267. <https://doi.org/10.1080/01463373.2012.751436>
- Byrne, B. (2011). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge.
- 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. <https://doi.org/10.1037/0021-9010.85.1.65>
- Demerouti, E., Bakker, A. B., Geurts, S. A. E., & Taris, T. W. (2009). Daily recovery from work-related effort during non-work time. In S. Sonnentag, P. L. Perrewé, & D. C. Ganster (Eds.), *Current perspectives on job-stress recovery: Research in occupational stress and well-being* (Vol. 7, pp. 85–123). JAI Press. [https://doi.org/10.1108/S1479-3555\(2009\)0000007006](https://doi.org/10.1108/S1479-3555(2009)0000007006)
- Demerouti, E., Bakker, A. B., & Halbesleben, J. R. B. (2015). Productive and counterproductive job crafting: A daily diary study. *Journal of Occupational Health Psychology*, 20, 457–469. <https://doi.org/10.1037/a0039002>
- Demerouti, E., & Rispens, S. (2014). Improving the image of student-recruited samples: A commentary. *Journal of Occupational and Organizational Psychology*, 87, 34–41. <https://doi.org/10.1111/joop.12048>
- Demerouti, E., Xanthopoulou, D., Petrou, P., & Karagkounis, C. (2017). Does job crafting assist dealing with organizational changes due to austerity measures? Two studies among Greek employees. *European Journal of Work and Organizational Psychology*, 26, 574–589. <https://doi.org/10.1080/1359432X.2017.1325875>
- Edwards, J. R., & Rothbard, N. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *Academy of Management Review*, 25, 178–200. <https://doi.org/10.5465/AMR.2000.2791609>
- Etzion, D., Eden, D., & Lapidot, Y. (1998). Relief from job stressors and burnout: Reserve service as a respite. *Journal of Applied Psychology*, 83, 577–585. <https://doi.org/10.1037/0021-9010.83.4.577>
- Fong, C. Y. M., Tims, M., & Khapova, S. N. (2022). Coworker responses to job crafting: Implications for willingness to cooperate and conflict. *Journal of Vocational Behavior*, 138, 103781. <https://doi.org/10.1016/j.jvb.2022.103781>
- Fritz, C., & Sonnentag, S. (2005). Recovery, health, and job performance: Effects of weekend experiences. *Journal of Occupational Health Psychology*, 10, 187–199. <https://doi.org/10.1037/1076-8998.10.3.187>

- Hahn, V. C., Binnewies, C., Sonnentag, S., & Mojza, E. J. (2011). Learning how to recover from job stress: Effects of a recovery training program on recovery, recovery-related self-efficacy, and well-being. *Journal of Occupational Health Psychology, 16*, 202–216. <https://doi.org/10.1037/a0022169>
- Hahn, V. C., & Dormann, C. (2013). The role of partners and children for employees' psychological detachment from work and well-being. *Journal of Applied Psychology, 98*, 26–36. <https://doi.org/10.1037/a0030650>
- Hakanen, J. J., Peeters, M. C. W., & Schaufeli, W. B. (2018). Different types of employee well-being across time and their relationships with job crafting. *Journal of Occupational Health Psychology, 23*, 289–301. <https://doi.org/10.1037/ocp0000081>
- Hobfoll, S. E. (1998). *Stress, culture, and community: The psychology and physiology of stress*. Plenum Press. <https://doi.org/10.1007/978-1-4899-0115-6>
- Hochwarter, W. (2014). On the merits of student-recruited sampling: Opinions a decade in the making. *Journal of Occupational and Organizational Psychology, 87*, 27–33. <https://doi.org/10.1111/joop.12043>
- Ilies, R., Keeney, J., & Scott, B. A. (2011). Work–family interpersonal capitalization: Sharing positive work events at home. *Organizational Behavior and Human Decision Processes, 114*(2), 115–126. <https://doi.org/10.1016/j.obhdp.2010.10.008>
- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451–477). Cambridge University Press.
- Kashy, D. A., & Snyder, D. K. (1995). Measurement and data analytic issues in couples research. *Psychological Assessment, 7*, 338–348. <https://doi.org/10.1037/1040-3590.7.3.338>
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. The Guilford Press.
- Kinnunen, U., Feldt, T., Siltaloppi, M., & Sonnentag, S. (2011). Job demands–resources model in the context of recovery: Testing recovery experiences as mediators. *European Journal of Work and Organizational Psychology, 20*, 805–832. <https://doi.org/10.1080/1359432X.2010.524411>
- Leana, C., Appelbaum, E., & Shevchuk, I. (2009). Work process and quality of care in early childhood education: The role of job crafting. *Academy of Management Journal, 52*, 1169–1192. <https://doi.org/10.5465/AMJ.2009.47084651>
- Mäkikangas, A. (2018). Job crafting profiles and work engagement: A person-centred approach. *Journal of Vocational Behavior, 106*, 101–111. <https://doi.org/10.1016/j.jvb.2018.01.001>
- Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in organizational behavior. *Journal of Organizational Behavior, 27*, 1031–1056. <https://doi.org/10.1002/job.406>
- Nepon, T., Flett, G. L., Hewitt, P. L., & Molnar, D. S. (2011). Perfectionism, negative social feedback, and interpersonal rumination in depression and social anxiety. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences du Comportement, 43*, 297–308. <https://doi.org/10.1037/a0025032>
- Nielsen, K., & Abildgaard, J. S. (2012). The development and validation of a job crafting measure for use with blue-collar workers. *Work and Stress, 26*, 365–384. <https://doi.org/10.1080/02678373.2012.733543>
- Nielsen, K., Antino, M., Sanz-Vergel, A., & Rodríguez-Muñoz, A. (2017). Validating the job crafting questionnaire (JCRQ): A multi-method and multi-sample study. *Work and Stress, 31*, 82–99. <https://doi.org/10.1080/02678373.2017.1293752>
- Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D. (2010). Diary studies in organizational research: An introduction and some practical recommendations. *Journal of Personnel Psychology, 9*, 79–93. <https://doi.org/10.1027/1866-5888/a000009>
- Oldham, G. R., & Fried, Y. (2016). Job design research and theory: Past, present and future. *Organizational Behavior and Human Decision Processes, 136*, 20–35. <https://doi.org/10.1016/j.obhdp.2016.05.002>
- 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. <https://doi.org/10.1080/1359432X.2016.1160891>
- 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. <https://doi.org/10.1002/job.1783>
- Petrou, P., Demerouti, E., & Schaufeli, W. B. (2015). Crafting the change: The role of employee job crafting behaviors for successful organizational change. *Journal of Occupational Health Psychology, 20*, 470–480. <https://doi.org/10.1037/a0039003>

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures, 6*, 77–98. <https://doi.org/10.1080/19312458.2012.679848>
- Rasbash, J., Steele, F., Browne, W. J., & Goldstein, H. (2012). *A user's guide to MLwiN* (Vol. v2.26). Centre for Multilevel Modelling, University of Bristol.
- Robledo, E., Zappalà, S., & Topa, G. (2019). Job crafting as a mediator between work engagement and wellbeing outcomes: A time-lagged study. *International Journal of Environmental Research and Public Health, MDPI, 16*, 1376. <https://doi.org/10.3390/ijerph16081376>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of Statistical Software, 48*, 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. *The Journal of Educational Research, 99*, 323–338. <https://doi.org/10.3200/JOER.99.6.323-338>
- Schulz, A. D., Schöllgen, I., & Fay, D. (2019). The role of resources in the stressor–detachment model. *International Journal of Stress Management, 26*, 306–314. <https://doi.org/10.1037/str0000100>
- Shi, Y., She, Z., Li, D., Zhang, H., & Niu, K. (2021). Job crafting promotes internal recovery state, especially in jobs that demand self-control: A daily diary design. *BMC Public Health, 21*, 1, 1889–13. <https://doi.org/10.1186/s12889-021-11915-1>
- Shi, Y., She, Z., Zhou, Z. E., Zhang, N., & Zhang, H. (2022). Job crafting and employee life satisfaction: A resource–gain–development perspective. *Applied Psychology: Health and Well-Being, Early View, 14*, 1483–1502. <https://doi.org/10.1111/aphw.12374>
- Shin, Y., Hur, W., & Choi, W. (2020). Coworker support as a double-edged sword: A moderated mediation model of job crafting, work engagement, and job performance. *The International Journal of Human Resource Management, 31*, 1417–1438. <https://doi.org/10.1080/09585192.2017.1407352>
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between non-work and work. *Journal of Applied Psychology, 88*, 518–528. <https://doi.org/10.1037/0021-9010.88.3.518>
- Sonnentag, S., & Bayer, U. V. (2005). Switching off mentally: Predictors and consequences of psychological detachment from work during off-job time. *Journal of Occupational Health Psychology, 10*, 393–414. <https://doi.org/10.1037/1076-8998.10.4.393>
- Sonnentag, S., & Fritz, C. (2007). The recovery experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology, 12*, 204–221. <https://doi.org/10.1037/1076-8998.12.3.204>
- Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior, 36*, 10–72. <https://doi.org/10.1002/job.1924>
- Sonnentag, S., Tian, A. W., Cao, J., & Grushina, S. V. (2021). Positive work reflection during the evening and next-day work engagement: Testing mediating mechanisms and cyclical processes. *Journal of Occupational and Organizational Psychology, 94*, 836–865. <https://doi.org/10.1111/joop.12362>
- Sonnentag, S., & Zijlstra, F. R. H. (2006). Job characteristics and off-job activities as predictors of need for recovery, well-being, and fatigue. *Journal of Applied Psychology, 91*, 330–350. <https://doi.org/10.1037/0021-9010.91.2.330>
- Tadić Vujčić, M., Oerlemans, W. G., & Bakker, A. B. (2017). How challenging was your work today? The role of autonomous work motivation. *European Journal of Work and Organizational Psychology, 26*(1), 81–93. <https://doi.org/10.1080/1359432X.2016.1208653>
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin, 103*, 193–210. <https://doi.org/10.1037/0033-2909.103.2.193>
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *South African Journal of Industrial Psychology, 36*, 1–9. <https://doi.org/10.4102/sajip.v36i2.841>
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior, 80*, 173–186. <https://doi.org/10.1016/j.jvb.2011.05.009>
- Tims, M., Bakker, A. B., & Derks, D. (2014). Daily job crafting and the self-efficacy - performance relationship. *Journal of Managerial Psychology, 29*, 490–507. <https://doi.org/10.1108/JMP-05-2012-0148>

- Tims, M., Bakker, A. B., & Derks, D. (2015). Examining job crafting from an interpersonal perspective: Is employee job crafting related to the well-being of colleagues? *Applied Psychology: An International Review*, *64*, 727–753. <https://doi.org/10.1111/apps.12043>
- Tims, M., Bakker, A. B., Derks, D., & Van Rhenen, W. (2013). Job crafting at the team and individual level: Implications for work engagement and performance. *Group and Organization Management*, *18*, 230–240. <https://doi.org/10.1177/1059601113492421>
- Tims, M., & Parker, S. K. (2020). How coworkers attribute, react to, and shape job crafting. *Organizational Psychology Review*, *10*, 29–54. <https://doi.org/10.1177/204138661989608>
- Tims, M., Twemlow, M., & Fong, C. Y. M. (2021). A state-of-the-art overview of job-crafting research: Current trends and future research directions. *Career Development International*, *27*(1), 54–78. <https://doi.org/10.1108/CDI-08-2021-0216>
- Van den Broeck, A., De Cuyper, N., De Witte, H., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the job demands–resources model. *European Journal of Work and Organizational Psychology*, *19*, 735–759. <https://doi.org/10.1080/13594320903223839>
- Wang, H., Li, P., & Chen, S. (2020). The impact of social factors on job crafting: A meta-analysis and review. *International Journal of Environmental Research and Public Health*, *17*(21), 8016. <https://doi.org/10.3390/ijerph17218016>
- Westman, M. (2001). Stress and strain crossover. *Human Relations*, *54*, 717–751. <https://doi.org/10.1177/0018726701546002>
- Wheeler, A. R., Shanine, K. K., Leon, M. R., & Whitman, M. V. (2014). Student-recruited samples in organizational research: A review, analysis, and guidelines for future research. *Journal of Occupational and Organizational Psychology*, *87*, 1–26. <https://doi.org/10.1111/joop.12042>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*, 179–201. <https://doi.org/10.5465/amr.2001.4378011>
- Zito, M., Colombo, L., Borgogni, L., Callea, A., Cenciotti, R., Ingusci, E., & Cortese, C. G. (2019). The nature of job crafting: Positive and negative relations with job satisfaction and work-family conflict. *International Journal of Environmental Research and Public Health*, *16*(7), 1176. <https://doi.org/10.3390/ijerph16071176>

How to cite this article: Sanz-Vergel, A. I., Nielsen, K., Rodríguez-Muñoz, A., & Antino, M. (2023). What happens at work does not always stay at work: Daily job crafting and detachment among colleagues. *Applied Psychology*, 1–25. <https://doi.org/10.1111/apps.12499>