Job Crafting Mediates How Empowering Leadership and Employees' Core Self-Evaluations

Predict Favorable and Unfavorable Outcomes

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Abstract

Based on job crafting theory and workplace resources theories, the present study develops a model of both antecedents and consequences of job crafting. We hypothesized that subordinates' perceptions of empowering leadership and core self-evaluations influence employee job crafting behaviors, which subsequently influence four outcomes: improving three employee well-being outcomes, (a) work-family enrichment, (b) flourishing, and (c) life satisfaction; and simultaneously reducing the organizational outcome of (d) deviant behaviors. Three-waves of data over nine months were collected from U.S. full-time employees ($n = 276$). Results showed empowering leadership and core self-evaluations positively related to expansive/approach forms of job crafting behaviors, which in turn related to the three different well-being outcomes. However, job crafting did not affect employee deviant behavior. Instead, empowering leadership and core self-evaluations directly predicted less deviant behavior. With the imputed data, we also found job crafting had a significant but weak relationship with deviant behavior. These findings provide an integrated understanding of how and why employees engage in job crafting, and the important influence that job crafting has on employees' subjective well-being. The present study advances leadership and job crafting theories, providing practical recommendations for promoting employee well-being and decreasing undesirable behaviors in the form of workplace deviance.

Keywords: empowering leadership, core self-evaluations, job crafting, well-being, deviant behavior

Job Crafting Mediates How Empowering Leadership and Employees' Core Self-Evaluations Predict Favorable and Unfavorable Outcomes

Job redesign is a widely used strategy to create high-performance work contexts (Hackman & Oldham, 1980; Holman & Axtell, 2016; Parker, Morgeson, & Johns, 2017). However, research suggests that the typical top-down job redesign by organizations may not address emergent demands in unpredictable environments, partly because it does not consider individual differences (Demerouti, 2014). Thus, job crafting, initiated from the bottom-up by individual employees themselves, has been suggested as a potential means to gain competitive advantage (Wrzesniewski & Dutton, 2001). Job crafting consists of employees' self-oriented proactive behaviors that change their jobs in personally meaningful ways, altering social and structural job resources and the degree of challenge in the job (Tims, Bakker, & Derks, 2012; Wrzesniewski & Dutton, 2001).

Recent studies have proposed, searched for empirically, or reviewed multiple possible dimensions of job crafting (e.g., empirical article by Bruning & Campion, 2018; meta-analysis by Lichtenthaler & Fischbach, 2019; review by Zhang & Parker, 2019). They do not totally agree with each other, but one overlap in their categories resembles an approach-avoidance dimension, with approach dimensions related more to positive work outcomes and avoidance dimensions more to negative outcomes. Based on job demands-resources theory (JD-R; Bakker & Demerouti, 2007), the present study examines approach crafting in the form of employees crafting by increasing their resources or increasing their job's challenging demands (Lichtenthaler & Fischbach, 2019). Successful crafting should result in better person-job fit (Rudolph, Katz, Lavigne, & Zacher, 2017), which allows employees to flourish and act positively in their work (and life) roles.

The present study focuses on approach crafting in which employees are motivated to craft their jobs for reasons such as desires to create meaningfulness and identity through work experiences and/or to meet their inherent needs (e.g., positive self-image, human connections with others, and control over the job); they also search for the crafting opportunities available to them (Berg, Dutton, & Wrzesniewski, 2008).

Tims et al.'s (2012) description of job crafting focused on job demands and job resources that employees use to craft their jobs, and they conceptualized job crafting as consisting of four dimensions using the framework of the JD-R theory (Bakker & Demerouti, 2007): (a) increasing social resources (e.g., seeking supervisors' feedback), (b) increasing structural resources (e.g., learning new things), (c) increasing challenging demands (e.g., seeking additional responsibilities), and (d) decreasing hindering demands (e.g., diminishing mentally demanding jobs). Seeking resources and challenges via job crafting addresses employee well-being and behavioral outcomes, based on JD-R theory (Bakker & Demerouti, 2007, 2017). For the present study, one environmental resource (empowering leadership) and one personal resource (core self-evaluation) were chosen for examination as potential antecedents of job crafting.

The study contributes to job crafting theory by focusing on employees' *ability* to successfully craft their jobs and on job crafting's relationship with both well-being and deviant behaviors. First, we examine job and personal resources based on JD-R theory that are specifically chosen because they can enhance that ability. Regarding job resources, the employees' supervisor could disallow job crafting, closely supervising them to be sure they do their jobs as previously defined. This would render employees unable to craft. Alternatively, supervisors can enable their subordinates to craft their own jobs by providing them the autonomy or freedom to do so and by helping to develop employees' abilities and confidence to craft their

jobs, and these supervisor behaviors are directly in the definition of empowering leadership (e.g., Ahearne, Mathieu, & Rapp, 2005; Zhang & Bartol, 2010). Thus, empowering leaders help to create the employees' ability to job craft. Regarding personal resources, employees with favorable core self-evaluations have self-beliefs and control beliefs (e.g., Judge, Bono, Erez, & Locke, 2005) that provide them with both the ability and confidence in their ability to control their own jobs through crafting. These are necessary components to successfully undertake any task, including job crafting. Regarding the outcomes in the study, whereas previous research on job crafting has focused on employees' positive work behaviors and work-related well-being (e.g., a meta-analysis by Rudolph et al., 2017), the present study expands the scope of potential outcomes to negative deviant work behaviors and more general well-being life outcomes.

Resources as Antecedents of Job Crafting

A number of studies showed that job crafting is associated with favorable work-related outcomes, including performance, career success, and well-being (Cenciotti, Alessandri, & Borgogni, 2016; Petrou, Demerouti, & Schaufeli, 2015; Rudolph et al., 2017). Because job crafting can have positive effects, it is important to uncover factors that can lead to employees' crafting.

A few personal characteristics predicting job crafting have been found: self-efficacy (Tims, Bakker, & Derks, 2014), proactivity personality (Bakker, Tims, & Derks, 2012), and psychological capital (Kim & Beehr, 2019). Researchers have also begun to look at selected job characteristics (e.g., autonomy, Niessen, Weseler, & Kostova, 2016) and leadership styles (e.g., transformational leadership, Wang, Demerouti, & Le Blanc, 2017; connecting (team building) leadership, Mäkikangas, Bakker, & Schaufeli, 2017; servant leadership, Harju, Schaufeli, & Hakanen, 2018) as potential determinants of crafting. Regarding leadership predictors of job

crafting, transformational leaders remain very much in charge of the situation. A key feature of transformational leadership is the leader forming a vision and inspiring the subordinates to accept and implement that vision (e.g., Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Transformational leaders are also supportive and provide autonomy to subordinates, but the purpose of the autonomy is for subordinates to implement the leader's vision effectively, not to change the nature of the job to fit themselves.

Servant leadership, a philosophy developed by Greenleaf (1977), has some overlap with empowering leadership. The central feature of empowering leadership is that the leader provides power or autonomy to the subordinates, while the central feature of servant leadership is that the leader serves the subordinates instead of the subordinates serving the leader. Thus, the central feature of empowering leadership includes allowing the subordinate to have autonomy in many forms, including autonomy to alter the nature of the job. Although servant leadership usually would result in subordinates' autonomy, that is not its main feature, which is a philosophy of serving employees' needs so they may develop—and even become servants themselves (Greenleaf, 1977). The theoretical construct of servant leadership has been described as having no consistent set of dimensions (e.g., Liden, Wayne, Zhao, & Henderson, 2008) and having no consensus about a definition (Van Dierendonck, 2011). Spears (2010) was an early proponent of servant leadership and president of the Greenleaf center for servant leadership, and he conceptually developed ten critical facets of servant leaders, but he did not include empowering among them. Operationally, most measures of servant leadership include empowerment as one of several subscales (e.g., Liden et al., 2008; Van Dierendonck & Nuijten, 2011; also as seen in a review by Van Dierendonck, 2011), however, which is why we conclude there is some overlap. We chose to study the more specific variable of empowering leadership rather than a broader one

such as servant leadership, because we think it is theoretically more related to job crafting, the mediator in our model. As explained by Kim and Beehr (2018; p. 186), "Empowering leaders provide the subordinates with the latitude or autonomy to design their own work, and the autonomy provided by empowering leaders can trigger subordinates' job crafting behaviors."

Questions about predictors of job crafting remain, however, and from JD-R theory, we propose two major resources in the work setting: leaders who encourage and allow job crafting (empowering leaders), and employees' own sense of self-competence (core self-evaluations; CSEs). Tims et al.'s (2012) development of job crafting theory was based on employees' crafting of resources. JD-R theory is very good at providing an outline of types of resources in the work setting. The basic assumptions of JD-R are that jobs can contain characteristics classified as demands and that both the job and the person can have characteristics classified as resources (e.g., Bakker & Demerouti, 2007; Schaufeli & Taris, 2014). The demands can be stressful because they are associated with expenditure of psychological and physiological effort. Resources, the focus of the present study, are aspects of either the person (e.g., personality and ability) or the job environment (e.g., helpful coworkers and autonomy), that can ease the demands or make it easier to achieve goals. Resources are thus valuable to the employee, who therefore strives to keep and acquire them, even using or giving up some resources to keep or gain others, a process labeled resource investment in the closely-related conservation of resources theory (COR; Hobfoll, 1989). Conceptualized as a resource gain spiral in COR, the idea is that employees increase their total resources by investing or using their current resources in order to gain others. In the present study, the situational resource of empowering leadership and the personal resource of core self-evaluations are expected to promote job crafting. Job crafting itself is a proactive way for employees to gain more resources—social resources,

structural resources, challenge resources, and reducing hindrances (lack of resources) (Tims et al., 2012).

In an employee's work environment, the leader or supervisor plays an important role because of his or her position of power over subordinates. Therefore, we attempt to establish this important person's effect on job crafting. One previous study examined transformational leadership (Wang et al., 2017), and one examined connecting leadership in a team-level study (Mäkikangas et al., 2017) in relation to crafting. Although these are popular variables in leadership research (especially transformational leadership), we examine empowering leadership because it is related theoretically and more specifically to employees taking control of their own job situations, due to its more explicit and direct focus on allowing and encouraging employees to take charge of their own work (i.e., crafting their jobs).

In terms of JD-R theory (Bakker & Demerouti, 2007, 2017), empowering leadership is defined as the leader providing employees with greater environmental resources, including responsibility, autonomy, authority, and support for employee development, allowing more independent work, thereby increasing subordinates' sense of competence, control, meaning, and impact (Ahearne et al., 2005; Zhang & Bartol, 2010). Although job crafting, because it consists of *self-initiated* behaviors, cannot logically be fully "*led*" by leaders, leadership style may be an important contextual factor influencing the extent that employees feel an opportunity to customize their jobs. We propose that empowering leadership is an especially good theoretical choice for research on a way for leaders to influence and encourage subordinates to design their own work, that is, to engage in job crafting behaviors—because empowering leadership behaviors consist of encouragement for subordinates to exercise the autonomy, responsibility, and independence needed for job crafting.

Job crafting entails the employee himself or herself altering their own job to fit their abilities or needs (or both) better, and it consists of proactive behavior (e.g., Tims et al., 2012; Wrzesniewski & Dutton, 2001). Organizations are typically designed by having jobs defined hierarchically, that is by higher authority such as work design experts or supervisors. For the employee to engage in proactive job crafting requires the employee to be empowered and have the autonomy to make changes. Otherwise, redesigning one's own job is unauthorized and an act of insubordination.

Empowering leadership theory promotes the importance of autonomy and developmental support of self-leadership skills in subordinates, a significant element for creating intrinsic motivation, which can result in productive work behaviors; empowering leadership was primarily linked to favorable work outcomes, including creativity, careers, work effort, and job performance (Amundsen & Martinsen, 2015; Kim & Beehr, 2017a; Zhang & Bartol, 2010). Empowering leadership also helped employees engage in more self-initiated, change-oriented behaviors, providing a belief that they have the power and have been delegated the authority to do so (Li, Liu, Han, & Zhang, 2016; Raub & Robert, 2010). We argue that job crafting is a specific self-initiated, change-oriented employee behavior.

If job crafting is an attempt to gain more resources, empowering leadership is a job resource that can be used to aid in this attempt, which is the investment principle of resources theories (Bakker & Demerouti, 2017; Hobfoll, 1989). There are several theoretical reasons that empowering leadership can be a predictor of employee job crafting (Kim & Beehr, 2018). First, leaders providing freedom in how to do tasks increase their subordinates' ability to rethink their work and revise it, so it will meet their own needs, skills, and preferences. We note that the opposite of empowering leadership is micromanaging, allowing no leeway for subordinates to

use their own discretion on the job. Discretion in work implies supervisors trust the employee; the provision of job latitude and self-determination in accomplishing their tasks signals trust from the leader (Zhang & Bartol, 2010). Second, empowering leaders provide subordinates with necessary resources by sharing task-relevant information and expressing confidence in subordinates' abilities (Ahearne et al., 2005). Due to leaders' communication explaining how and what employees do in their work is connected to the effectiveness of the group or organization, employees may try to adjust their work activities to be more in line with the organization's goals. This information and other resources can increase a sense of control and competence at work (Gist & Mitchell, 1992), leading to a higher motivation and performance (e.g., Hackman & Oldham, 1980). This intrinsic motivation makes employees feel more confident about their work roles, and consequently they seek more challenging tasks. Lastly, empowering leaders' development support (Amundsen & Martinsen, 2014) may be favorable for active learning, allowing employees to adapt their tasks through personal initiative. Overall, participation in work processes allows employees to mobilize job resources to increase their task knowledge and enhance their skills (Ahearne et al., 2005; Zhang & Bartol, 2010).

Thus, increased autonomy under empowering leaders can lead to proactive behavior (Hornung & Rousseau, 2007; Martin, Liao, & Campbell, 2013), thereby allowing employees to customize their work (Bakker et al., 2012; Leana, Appelbaum, & Shevchuk, 2009). In summary, job crafting is encouraged under the resourceful working conditions promoted by empowering leaders.

H1. Empowering leadership is positively related to job crafting.

In addition to the environmental resource of empowering leadership, we propose a personal resource from JD-R theory (Bakker & Demerouti, 2017) as a second potential

antecedent of job crafting, the employees' core self-evaluations (CSEs). CSEs are individuals'

assessments of their own worthiness, competence, and capabilities (Judge et al., 2005); they are

fundamental evaluations that people make of themselves, especially of their abilities and the

control they can exercise over their environment. Job crafting is in essence a form of control

employees exert over their jobs to control the very nature of the job in ways that fit themselves

better, thereby gaining more resources for them to be even more effective.

Based on COR theory (Hobfoll, 1989), some resources are valuable in their own right,

but others are especially important because they can be used to obtain other resources.

Employees with high core self-evaluations have the confidence to embrace challenging demands

that can be involved in job crafting. Based on the concept of job crafting as an attempt to gain

resources, the investment principle of resources theories (Bakker & Demerouti, 2017; Hobfoll,

1989) suggests the job crafters could be using the personal resource of CSE to gain more

resources. CSE is also valuable in its own right, however, consisting of positive feelings about

the self (e.g., by its component of high self-esteem), and it is positively related to both job

satisfaction and life satisfaction for employees (e.g., Judge, Locke, Durham, & Kluger, 1998).

Individuals with high core self-evaluations hold positive self-concepts that raise their

motivation levels and improve work performance; core self-evaluations have been linked with

important outcomes, such as intrinsic motivation as well as various organizational behaviors and

perceptions of the work environment (e.g., job characteristics and job stress; meta-analysis by

Chang, Ferris, Johnson, Rosen, & Tan, 2012). We propose that core self-evaluations can lead to

employee job crafting behaviors. As noted earlier, employees are motivated to engage in job

crafting behaviors to satisfy their needs for control, a positive self-image, and relatedness at work

(Wrzesniewski & Dutton, 2001). These needs are likely to be high among employees who have

high CSEs, and they can be satisfied by job crafting. They may be interested in seeking new additional tasks or challenges because of their beliefs that they are worthy, capable, and competent; people with a positive self-concept tend to pursue intrinsic work goals (Judge et al., 2005) and view challenging tasks as opportunities that they can master and that benefit them (Srivastava, Locke, Judge, & Adams, 2010). Thus, job crafting is a form of proactivity that may be affected by individuals' estimates of their own personal abilities (CSEs).

Only one previous study looked at CSEs as a predictor of job crafting (Tims & Akkermans, 2017), but the self-confidence and sense of control that are inherent in CSEs allow employees to take over their jobs and change them in ways they deem to better match their own preferences and abilities—that is, CSEs lead to job crafting. Therefore, we propose that individuals who think of themselves as capable, valuable, and competent (high CSEs) are more likely to identify, seek, or act on opportunities to proactively alter their jobs (crafting) to benefit themselves as well as the organization by creating better person-job fit (e.g., Tims, Derks, & Bakker, 2016).

H2. Core self-evaluations are positively related to job crafting.

Both empowering leadership and core self-evaluations as resources can theoretically lead employees to engage in job crafting behaviors based on JD-R theory, and yet this idea has not been investigated previously.

Consequences of Job Crafting

In addition to identifying potential antecedents of job crafting, the present study attempted to extend knowledge about the consequences of job crafting by adding three well-being variables that are new to the crafting literature (work-family enrichment, flourishing, and life satisfaction) and one organizational behavior, (reduced) employee workplace deviance.

Well-being. Regarding well-being in particular, JD-R theory (Bakker & Demerouti, 2017) argues that resources can be used to protect and enhance an employees' well-being, and we propose that job crafting will be positively related to well-being because job crafting can be defined in increasing one's resources (Tims, Bakker, & Derks, 2013). Encouraging employees to craft their own jobs so that it better fits themselves (Tims et al., 2016) improves person-environment fit (P-E fit), and P-E fit is linked to employee well-being (Edwards & Rothbard, 2005).

A number of definitions and measures of well-being have been suggested; it can be broadly defined in terms of satisfaction within all life domains, including work and family, and pursuing purpose and meaning in life, as well as having social and personal resources for making progress toward valued and meaningful goals (Diener, Suh, Lucas, & Smith, 1999; Ryan & Deci, 2001). We focus on three indicators of the multidimensional construct of employee well-being: work-family enrichment, flourishing, and life satisfaction. Previous research shows that spillover of favorable states from work to non-work lives can generally occur (e.g., meta-analysis by Erdogan, Bauer, Truxillo, & Mansfield, 2012), and our prediction that employees' overall well-being in their lives is promoted by crafting in their work domain is an example of such spillover.

Work-family enrichment refers to "the extent to which experiences in one role improve the quality of life in another role" and is therefore a clear example of positive spillover from work to family domains (Greenhaus & Powell, 2006, p. 73). Job resources, including autonomy and social support, were suggested to have positive effects on experienced work-family enrichment, because they enable employees to make a better fit between both domains (Lapierre, Li, Kwan, Greenhaus, DiRenzo, & Shao, 2018). As noted earlier, employees modifying aspects of their job can increase job resources (Tims et al., 2013); some of these increased resources

derived from work may improve the quality of family life. For example, based on JD-R theory, sufficient job resources, such as increased autonomy, constructive feedback, and opportunities for growth, evoke more positive experiences, feelings, and energies, which can have a positive effect on private life, because employees go home happily and more energetically after a successful day at work (Bakker & Geurts, 2004). There may even be some very specific increase in resources, such as time or timing, if employees craft their jobs to include flexible scheduling so that they can do family-related activities. Thus, if employees actively craft their job to increase their resources, their work-family enrichment will increase.

H3. Job crafting is positively related to work-family enrichment.

Employee job crafting behaviors are also predicted to be associated with greater levels of flourishing in life. A broad concept of psychological well-being, flourishing refers to the combination of feeling good and functioning effectively (Diener, Helliwell, Lucas, & Schimmack, 2009). Only one previous study examined employees' flourishing in relation to job crafting, and using a different measure of crafting from the present study's, it found that two of three job crafting subdimensions were correlated with flourishing (Demerouti, Bakker, & Gevers, 2015). Employees successfully crafting their job resources and experiences can result in meaningfulness because employees direct their jobs towards their own interests and achieving their own goals, resulting in positive affect, an important component of flourishing (Keyes, 2007). Increasing challenging demands, one part of crafting, also results in pleasurable emotions (e.g., joy, excitement, and enthusiasm) and opportunities for growth (Lepine, Podsakoff, & Lepine, 2005). Positive relationships at work, another part of crafting, theoretically increase employees' vitality and learning (Ragins & Dutton, 2007), and therefore they should help people

flourish. Taken together, resources generated by employees adjusting their work characteristics allow them to flourish in life.

H4. Job crafting is positively related to flourishing.

We also investigated one more aspect of wellness, employees' life satisfaction, defined as a one's overall quality of life (Diener, Emmons, Larsen, & Griffin, 1985). It is related to meaning taken from work experiences (e.g., Steger & Dik, 2010). Job crafting implies that employees influence the design of their jobs to create a better person-job fit, resulting in more meaningful jobs—crafting allows employees to express their own values and beliefs (Wrzesniewski, 2003). In addition, employees craft the relationships at work (social job resources) to make them more meaningful. The experience of meaning at work may spill over to enhance meaning in life and therefore life satisfaction (Judge & Watanabe, 1994).

H5. Job crafting is positively related to life satisfaction.

Deviance. Besides affecting the individual's well-being, job crafting can also affect the organization through employee behaviors. We propose (fewer) employee deviant behaviors as a potential consequence of job crafting. Deviance, defined as intentional employee behaviors that are harmful to other organizational members and/or to the organization itself, is an organizationally relevant outcome, because it is linked to high organizational costs and to organizations' needs to control these costly behaviors (Bennett & Robinson, 2003; Litzky, Eddleston, & Kidder, 2006). Whereas the relationship between job crafting and positive in-role task performance is well-established (e.g., meta-analysis by Rudolph et al., 2017), more negative organizational behaviors in the form of deviance have not been examined yet. We propose that employees with abundant resources and increased fit with their work environment, which are created by crafting their jobs, show enthusiasm in their jobs and are motivated to behave in ways

that benefit the organization and/or other employees rather than motivated to engage in deviant behaviors. Employee deviance is motivated when employees perceive some low resources in their work situation (e.g., as demonstrated by correlations reported in Fehr, Yam, He, Chiang, & Wei, 2017; Smoktunowicz, Baka, Cieslak, Nichols, Benight, & Luszczynska, 2015) or perceive their jobs as having stressful demands (e.g., Spector & Fox, 2005; Sprung & Jex, 2012; Zhang, Crant, & Weng, 2019). Engaging in proactive job crafting behaviors is expected to be linked to employees' perceived autonomy and control, which are resources in JD-R theory (Schaufeli & Taris, 2014). COR theory (Hobfoll, 1989) posits a resource gain spiral in which resources can be invested to gain other resources, and job crafting helps with this gain (Tims et al., 2014). With job crafting, employees can deal with their potentially stressful workload by adjusting their job resources and demands. Overall, employees with abundant resources and increased fit with their work environment, factors created by crafting their jobs, will have reduced motivation to engage in deviant behaviors.

H6. Job crafting is negatively related to deviant behaviors.

Mediation by Job Crafting

Hypotheses 1-6 propose each link in the model in Figure 1, and some of them have been tested before. The separate links are really secondary to the overall model itself, however, which is about mediation. In this model, job crafting transmits the impact of empowering leadership and core self-evaluations to employees' favorable well-being and unfavorable behaviors. That is, the reason empowering leadership and core self-evaluations can have effects on employees' personal well-being and deviant behaviors in the workplace is that job crafting enhances the individual's resources; based on JD-R (Bakker & Demerouti, 2007) and COR theories (Hobfoll, 1989), these increases in resources over time result in favorable employee outcomes.

H7. Job crafting mediates the relationship between empowering leadership and (a) work-

family enrichment, (b) flourishing, (c) life satisfaction, and (d) deviant behavior.

H8. Job crafting mediates the relationship between core self-evaluations and (a) work-

family enrichment, (b) flourishing, (c) life satisfaction, and (d) deviant behavior.

The present study contributes to the literature by advancing theories of job crafting, by

identifying additional sources of employees' motivation to craft, in both the work environment

(empowering leadership) and individual (core self-evaluations) domains, which expands the

theoretical and empirical literature on how and why employees craft their jobs. In addition,

examining work-family enrichment and life satisfaction as outcomes of job crafting also

contributes to the growing research on job crafting outcomes. The study of these theoretical links

provides empirical tests of job crafting as a key mediating mechanism linking leadership to a

range of well-being outcomes. Altogether, the study provides a better understanding of how

organizations can promote employee job crafting behaviors, which may lead to positive

outcomes for both the individual and organization.

Methods

Participants and Procedure

Participants were employed in several industries (e.g., education, finance, and

technology) and occupations (e.g., manager, teacher, and engineer); 61.2% were line employees,

17.4% supervisors, 15.6% managers, and 5.8% higher-level managers. Data were collected in

three waves over nine months in order to measure variables in the causal sequence implied by the

model in Figure 1, as well as to reduce the effects of common method bias (Podsakoff,

MacKenzie, & Podsakoff, 2012). Participants were recruited through Amazon's Mechanical

Turk (MTurk), which has a pool of people available to complete cognitive tasks. Participants

came from a wide range of jobs and geographic areas in the U.S. Recent studies showed that

MTurk respondents are highly educated and read survey instructions carefully. Furthermore, they

are diverse in terms of demographics, and their data are comparable in quality to other sources

(Buhrmester, Talaifar, & Gosling, 2018; Kees, Berry, Burton, & Sheehan, 2017; Ramsey,

Thompson, McKenzie, & Rosenbaum, 2016). Most importantly, regarding reliability and validity

(correlations among relevant variables), a recent study (Walter, Seibert, Goering, & O'Boyle,

2019) showed that for studies in the organizational sciences, the data from MTurk are as good as

data from other common sources (e.g., single organizations).

We required respondents to be full-time employed adults aged 18 and older working in

the US, and have at least a 95% approval rating from previous MTurk assignments, as

recommended (Casler, Bickel, & Hackett, 2013; Mason & Suri, 2012). Even though recent

research found that using only two complementary quality-control screening methods is likely to

be sufficient (DeSimone & Harms, 2018) we used multiple, standard quality-control screening

methods that are common in past research (Cheung, Burns, Sinclair, & Sliter, 2017; Peer,

Vosgerau, & Acquisti, 2014). Redundant IP addresses were blocked, several reversed-wording

questions were used, each survey included three attention-check items with factually true

answers, outliers were eliminated, surveys with more than 80% of the same answers to different

questions were eliminated, and surveys answered at Time 1 or Time 2 four times faster than the

average respondent were eliminated.

Initially, 800 employees completed the Time 1 survey. Of these, 59 cases were

disqualified (e.g., Non-US full-time employee) or had more than 50% missing data. We also

deleted 73 non-purposeful or low effort responses, resulting in 668 useful cases from the first

survey. An invitation email was sent to the 688 participants after the first survey for follow-up

surveys, using the functionality of the TurkPrime. Of the 668 responses that remained from the first survey, 532 (retention rate: 79.6%) participated in the second survey one month later; 93 of them were dropped for reasons noted regarding the Time 1 survey and also mismatched codes across the first two survey administrations. Thus, 439 participants were asked to answer the third survey 8 months after Time 2. Of these, 292 (retention rate: 66.5%) completed the final survey, but 16 cases were deleted due to outliers and failed attention checks. Therefore, a final sample of 276 responses were available for analyses: 55.3% were male, 82.8% white, and 69.9% were college-educated. Participants averaged 36.22 years old ($SD = 9.67$) and had worked an average of 40.91 hours per week ($SD = 7.34$) and in their current organization for an average of 6.73 years ($SD = 5.65$).

Because there was sample mortality across the three surveys, it is common to check if there is any systematic sample bias by comparing demographic differences between sample 1, vs. 2 and 3. Therefore, we examined demographic differences among three samples to assess whether the final sample (Time 3) was representative of the Time 1 and Time 2 samples. We found no major differences regarding samples' gender and age assessed at Time 1, Time 2, and Time 3; the mean age is 35.06 ($SD = 9.78$), 34.75 ($SD = 9.34$), and 36.22 ($SD = 9.67$) at Time 1, Time 2, and Time 3. The proportion of males is 54.6%, 53.8%, and 55.3% for each survey. Thus, although there was attrition in our sample across the three surveys, it does not seem that there exists any severe systematic sample bias on these analyses.

Measures

We measured the predictors, empowering leadership and core self-evaluations at Time 1, the mediator, job crafting, at Time 2, and the four outcomes, work-family enrichment, flourishing, life satisfaction, and deviant behaviors at Time 3.

We measured two dispositional variables that could be used as controls: social desirability as a control for employees' reports of deviance (because deviance is an undesirable behavior to admit) and trait negative affectivity to control for two subjective well-being variables that are state affective variables (flourishing and life satisfaction), both of which were measured at Time 2. We also measured one structural variable as a potential control, supervisory versus nonsupervisory position. Regarding social desirability as a control for deviant behaviors, deviant behaviors are undesirable and illegitimate behaviors such as stealing objects from the company, shirking work, and covering up one's mistakes (Kelloway, Loughlin, Barling, & Nault, 2002). Because they are undesirable, the trait of social undesirability could lead employees to distort their reports for them. Therefore, we tested deviant behavior reports for the employee's level of social desirability as a possible control. Regarding negative affectivity, we measured it to test as a control variable for predicting the two more affective criteria, flourishing and life satisfaction. Negative affectivity is a trait measure of affect (Watson, Clark, & Tellegen, 1988), and affective states may be influenced by it; therefore we could control more stable affect while predicting these two affective variables. Regarding supervisory-nonsupervisory status, supervisors could naturally have more autonomy and therefore more opportunities for job crafting as a part of their job description. Thus, we measured it as a possible control variable when predicting job crafting.

Empowering leadership (T1) was measured with a12-item measure (α = .91; Ahearne et al.; 2005; Zhang & Bartol, 2010). It has four subdimensions: work meaningfulness (e.g., "My supervisor helps me understand the importance of my work to the overall effectiveness of the company"), autonomy (e.g., "My supervisor allows me to do my job my way"), participation in decision making (e.g., "My supervisor solicits my opinion on decisions that may affect me"), and

supervisors' confidence in the subordinates' performance (e.g., "My supervisor believes that I can handle demanding tasks."), rated on a 5-point strongly disagree-strongly agree scale.

Core self-evaluations (T1) were measured using Judge, Erez, Bono, and Thoresen's (2003) 12-item scale (α = .89), which consists of four traits. Examples of items include "When I try, I generally succeed" (self-esteem), "I complete tasks successfully" (generalized self-efficacy), "Sometimes, when I fail I feel worthless" (emotional stability), and "I determine what will happen in my life" (locus of control), rated on a 5-point strongly disagree-to-strongly agree scale.

Job crafting (T2) was measured with the 15-item scale (α = .91; Tims et al., 2012). It has three dimensions: increasing structural job resources (e.g., "I try to develop myself professionally"), increasing social job resources (e.g., "I ask whether my supervisor is satisfied with my work"), and increasing challenging job demands (e.g., "I regularly take on extra tasks even though I do not receive extra salary for them"). The frequency of each behavior was rated on a 5-point scale from 1 (never) to 5 (very often).

Work-family enrichment (T3) was assessed using the four-items (α = .91) from Grzywacz and Marks (2000). An example item is "The things you do at work help you deal with personal and practical issues at home" rated on a 5-point frequency scale from 1 (never) to 5 (all the time).

Flourishing (T3) was measured using the eight-item flourishing scale (α = .90) from Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, and Biswas-Diener (2010). The scale captures several important aspects of human functioning, such as feelings of competence, having positive relationships, and leading a meaningful life. An example item is "I am engaged and interested in

my daily activities" rated on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Life satisfaction (T3) was measured with the five-item (α = .93) *Satisfaction with Life Scale* (*SWLS*; Diener et al., 1985). An example item is "The conditions of my life are excellent," rated on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Deviant behavior (T3) was measured with ten items (α = .88) from Kelloway, Loughlin, Barling, and Nault (2002), modified from Robinson and Bennett (1995), to assess interpersonal and organizational counterproductive behaviors. Respondents were asked to indicate how often they had engaged in each of the ten listed behaviors in the past 9 months. Example items include "gossiped about your supervisor (interpersonal deviance)" and "stayed out of sight to avoid work (organizational deviance)" rated on a 5-point frequency scale ranging from 1 (never) to 5 (very often).

Control variables (T2) were supervisory/nonsupervisory status at the first step in the model, and social desirability and negative affectivity at the second step. Among participants, 38.8% occupied supervisory or managerial positions, and 61.2% took entry-level positions. We coded job position 0 for employees and 1 for supervisors/managers or above. Social desirability was assessed with the five-item (α = .69) *Socially Desirable Response Set* (*SDRS*; Hays, Hayashi, & Stewart, 1989). An example item is "I am always courteous even to people who are disagreeable," rated on a 5-point scale from definitely true to definitely false. Negative affectivity (α = .94) was assessed with the *Positive and Negative Affect Scale* (*PANAS*; Watson et al., 1988), which contains ten adjectives about how the person feels (e.g., nervous, distressed, and irritable) answered on a 5-point scale from 1 not at all to 5 extremely. The use of these variables controls not only for their content (social desirability and negative affect), but because

they were measured from the same source as the rest of the data, they also control for common method variance, as the use of a marker variable does (Podsakoff et al., 2012).

Results

Imputation of Missing Data

As a result of our data collection at multiple time-points over nine months, we have high drop-out rates, and the presence of missing data could affect the study's findings. Therefore, we utilized multiple imputation to impute missing information for variables. We obtained estimates of the missing values by creating 20 imputed datasets, and SPSS generated a pooled set from the 20 imputed datasets (Rubin, 1987), which was used to compare the results from the original data.

We present analyses based on both the original data and imputed data, although the analyses including the imputed values generated similar results as the original data. Table 1 contains descriptive statistics and correlations from the original and the imputed data analysis. Looking first at the correlations, based on the original data, two predictors, empowering leadership ($r = .34$, $p < .01$) and core self-evaluations ($r = .21$, $p < .01$) were positively related to the mediator, job crafting, and job crafting was significantly related to three well-being outcomes: work-family enrichment ($r = .26$, $p < .01$), flourishing ($r = .24$, $p < .01$), and life satisfaction ($r = .20$, $p < .01$). The negative correlation between job crafting and deviant behavior was not significant, however ($r = -.05$, *ns*). Regarding the three control variables, negative affectivity was significantly correlated with two subjective well-being variables, flourishing ($r = -.19$, $p < .01$) and life satisfaction ($r = -.21$, $p < .01$). Social desirability also showed a weak but significant relationship with deviant behavior ($r = -.15$, $p < .05$). However, job position (supervisory vs. nonsupervisory status) was significantly related to only two variables, core self-

evaluation ($r = -.15$, $p < .05$) and negative affectivity ($r = .20$, $p < .01$). We also found that the direction and magnitude of correlations were broadly consistent in the imputed dataset.

Hypotheses and Model Testing

We obtained fit and parameter indices from LISREL 8.8 (Jöreskog and Sörbom, 2006). Because there were a large number of items for our $n = 276$, we needed to combine items for some indicators with many items. For the large measures, we used subscales where they existed, but we used parcels where subscales did not exist (Matsunaga, 2008). We did this out of necessity, but Little, Rhemtulla, Gibson, and Schoemann (2013) have shown that there usually need not be a controversy about it anyway. Additionally, parcels have the advantage of being more reliable than single items, and they have more total scale points so that they more closely approximate continuous measures (e.g., Little, Cunningham, Shahar, & Widamon, 2002; Rushton, Brainerd, & Pressley, 1983).

For empowering leadership, core self-evaluations, and job crafting constructs, subscales were used as indicators to form latent variables. The 4-item measure of work-family enrichment and 5-item measure of life satisfaction had no subscales, the small number of items for each scale did not allow parceling the items, and thus their items served as indicators. Flourishing was also a unidimensional construct without subscales, but the item-parceling method was applied (Little et al., 2013; Matsunaga, 2008); their eight items were randomly parceled to form four indicators of a latent variable (each consisting of two items). For the 10-item measure of deviant behavior, each subscale consisting of the five items of interpersonal or organizational deviance was randomly parceled into two indicators (one consisting of two items and one of three items), creating four indicators for deviant behavior. Regarding the two control variables, the 10 items measuring negative affectivity were randomly parceled to four indicators (two consisting of three

items each and two of two items each). Finally, for the five-item social desirability scale, the five items were used as indicators.

The measurement model or confirmatory factor analysis showed a good fit to the data, $\chi^2(621, N = 276) = 1236.31, p < .01$; CFI = .96; IFI = .96; NNFI = .95; RMSEA = .06. The hypothesized structural model from Figure 1 was tested; the model fitted the data adequately, $\chi^2(655, N = 276) = 1793.36, p < .01$; CFI = .93; IFI = .93; NNFI = .92; RMSEA = .08. Empowering leadership ($\beta = .30, p < .01$) and core self-evaluations ($\beta = .16, p < .05$) were positively related to job crafting, providing support for Hypotheses 1 and 2. Hypotheses 3 to 5, that job crafting would be positively related to work-family enrichment ($\beta = .30, p < .01$), flourishing ($\beta = .35, p < .01$), and life satisfaction ($\beta = .29, p < .01$), were also supported. However, Hypothesis 6 was not supported, because the path coefficient for job crafting to deviant behavior ($\beta = -.08$) was not significant.

With the imputed dataset, we reran the analyses and obtained the similar results as the original data. The measurement model fit indicated a good fit to the data, $\chi^2(621, N = 14028) = 51049.53, p < .01$; CFI = .95; IFI = .95; NNFI = .94; RMSEA = .08. The hypothesized model fit fitted the data acceptably, $\chi^2(655, N = 14028) = 77099.83, p < .01$; CFI = .91; IFI = .91; NNFI = .90; RMSEA = .09, which is somewhat worse than the model fit with the original dataset. Empowering leadership ($\beta = .25, p < .01$) and core self-evaluations ($\beta = .22, p < .01$) were positively related to job crafting, supporting for Hypotheses 1 and 2. Hypotheses 3 to 5 were also supported because job crafting was positively related to work-family enrichment ($\beta = .26, p < .01$), flourishing ($\beta = .32, p < .01$), and life satisfaction ($\beta = .26, p < .01$). Regarding the path from job crafting to deviant behavior, imputed data produced a different result from the original

data, indicating a significant but weak path coefficient between them (β = -.06, p < .05).

Therefore, Hypothesis 6 was supported in the imputed dataset in Figure 2.

In sum, the results suggested that through job crafting, empowering leadership and core self-evaluations had indirect paths to employees' well-being, but not to deviant behavior with the original data (failing to support H6).

Alternative Models

Also regarding mediation, two planned alternative models were examined to test the mediation hypotheses: One model added four direct paths from empowering leadership to the criteria (alternative model 1); if they were significant, it would suggest that the model's mediators do not fully explain the predictions by empowering leadership. The second alternative model added four direct paths from core self-evaluations to the criteria (alternative model 2); if they are significant, it suggests that the model's mediators do not fully explain the predictions of core self-evaluations.

The four new paths in alternative model 1 did not change any fit indices observed at the second decimal point, but produced a statistically significant improvement in the χ^2; three direct links from empowering leadership to flourishing (β = .23, p < .01), life satisfaction (β = .19, p < .01), and deviant behavior (β = -18, p < .05) were significant, $\Delta\chi^2$(4, N = 276) = 18.98, p <.001. In alternative model 2, core self-evaluations also had direct relationships with flourishing (β = .68, p < .01), life satisfaction (β = .58, p < .01), and deviant behavior (β = -.21, p < .05), which showed a statistically significant improvement in the chi-square, $\Delta\chi^2$(4, N = 276) = 144.84, p <.001, and the model showed greater improvement in fit than the first alternative model (with direct relationships with empowering leadership) did. The direct link from both empowering leadership and core self-evaluations to work-family enrichment was not significant in the

alternative models, however. The LISREL results of standardized direct and indirect effects using latent variables are reported in Table 2. As an example, the result shows an indirect effect (.07, $p < .01$) of empowering leadership on work-family enrichment mediated by job crafting (.29× .25 for calculation rules; i.e., Bollen, 1989). The influence of empowering leadership on work-family enrichment is therefore .15, $p < .01$. Comparing the magnitudes of these effects indicates that the effect of job crafting on work-family enrichment is larger than the total effect of empowering leadership on work-family enrichment.

We also tested the two alternative models on the imputed dataset as we did with the original dataset. There was no noticeable difference between the original dataset and imputed dataset, and the conclusion remained the same. The additional new paths in the alternative model 1 and 2 did not change any fit indices, but produced a statistically significant improvement in the χ^2; three direct links from empowering leadership to flourishing ($\beta = .13$, $p < .01$), life satisfaction ($\beta = .08$, $p < .01$), and deviant behavior ($\beta = -14$, $p < .01$) were significant, $\Delta\chi^2(4, N = 14028) = 384.42$, $p < .001$. In alternative model 2, core self-evaluations also had direct relationships with flourishing ($\beta = .65$, $p < .01$), life satisfaction ($\beta = .53$, $p < .01$), and deviant behavior ($\beta = -.19$, $p < .01$), which showed a statistically significant improvement in the chi-square, $\Delta\chi^2(4, N = 14028) = 5156.83$, $p < .001$, Additionally, we found that core self-evaluation had a significant relationship with job crafting ($\beta = .19$, $p < .01$) even after adding the four direct paths from core self-evaluation to the four criteria, which is a different outcome from what we got in the original dataset. Table 3 presents the results of standardized direct and indirect effects using the imputed dataset.

In summary, model comparisons suggested that empowering leadership not only predicted flourishing and life satisfaction via job crafting, but also may directly predict the two

outcomes. Our study also emphasized the importance of the mediating role of job crafting on the relationship of empowering leadership and core self-evaluations with work-family enrichment, because neither empowering leadership nor core self-evaluations had a direct relationship with work-family enrichment, losing predictive power once the mediator was taken into consideration. Deviant behavior was found to be directly related to the two exogenous predictors, empowering leadership and core self-evaluations, but the proposed mediator, job crafting, did not play a role in predicting deviance. Lastly, core self-evaluations had a direct but not an indirect relationship with flourishing and life satisfaction. Together, six of the possible eight direct relationships were significant, and the alternative models with direct relationships also improved some fit indices by small amounts. Therefore, mediation Hypotheses 7 and 8 were partially supported.

Discussion

Based on the rationale that job crafting would be engendered by both a key work environment factor (the supervisor) and individual difference (CSEs), and that crafting could increase availability of resources that can affect important outcomes, the study examined the ability for job crafting to mediate the relationships of these two resources with employee subjective well-being and deviant behavior. Results generally supported the hypothesized relationships. As an environmental resource, empowering leadership aided employees in crafting jobs to be more resourceful and challenging; the more autonomy and delegation subordinates received from their leaders' empowering behaviors, the more they engaged in job crafting activities. This finding was in line with JD-R theory and the prior argument that although job crafting is considered as an individual process, leadership styles may have an effect on it by allowing or even encouraging crafting by their subordinates (Wrzesniewski & Dutton, 2001).

The study contributes to job crafting theory by showing empowering leadership to be a specific leader style that can encourage employees to engage in job crafting. Personal resources in the form of core self-evaluations also predicted job crafting, although somewhat more weakly. Employees with favorable core self-evaluations proactively crafted their jobs, expanding challenge demands and resources that compose the jobs. Empirical evidence for core self-evaluations as antecedents of job crafting has been missing in the previous research. In sum, the study contributed to the job crafting literature by identifying important antecedents of job crafting. Based on JD-R theory, the model predicted, and the data showed, that job crafting could be significantly affected by the environmental resource of empowering leadership and also was dependent on employees' a major personal resource, employees' core self-evaluations.

We also found that job crafting was positively related to three well-being outcomes. Consistent with previous studies highlighting positive associations between job resources and work-family enrichment (Hakanen, Peeters, & Perhoniemi, 2011; Lapierre et al., 2018), resources assumed to be generated by crafting work characteristics or environments seemed to be beneficial to employees' families. Employees who may have mobilized the resources they need to feel well and to get things done properly at the workplace experienced enrichment at home. Job crafting also positively predicted employees' flourishing and life satisfaction. Previous research suggested that employees' job crafting results in increased person-job fit and meaningfulness, and it also allows employees to direct their work towards their passions and enjoyment (Tims & Bakker, 2010). Therefore crafting may lead to an increase in available job resources over time (Tims et al., 2013), and the results supported a positive potential spillover effect of these increased resources through job crafting: The crafting was related to employees feeling good (i.e., flourishing) and taking a positive outlook on their lives (i.e., life satisfaction)

in general, not just at work. Besides the link of job crafting to JD-R theory, these findings are also consistent with the COR theory proposal of gain spirals that should predict well-being (Hobfoll, 1989). Because flourishing and life satisfaction can themselves be considered psychological resources (Fredrickson, 2013), employees with high resources (triggered by crafting) may be more capable of obtaining still more resources in their lives.

Overall, the study extended well-being research by providing evidence that job crafting behaviors in the organization could contribute to obtaining other life resources. Regarding employee well-being as consequences of job crafting, most previous research has focused on work-related well-being (e.g., work engagement and job strain; Rudolph et al., 2017) and paid very little attention to how job crafting activities can be linked to employees experiencing more general well-being. The study's results bridged this gap and showed that increased resources by job crafting could affect not just the work domain but also could spill over and affect the non-work domain, leading to an increase in employees' work-family enrichment, flourishing, and life satisfaction.

Finally, empowering leadership has been primarily linked to behavioral outcomes, such as job performance and citizenship behaviors (Kim, Beehr, & Prewett, 2018), but employees' general well-being as a potential consequence of empowering leadership has been under-researched. Our study expanded the domain of empowering leadership by revealing the power of empowering leader behaviors to predict employees' flourishing and life satisfaction. Likewise, little research has examined the potential influence of empowering leadership on employees' deviant behavior. A recent study by Kim and Beehr (2017b) found indirect relationships for empowering leadership with deviant behaviors through two mediators: psychological ownership and self-efficacy. With regard to core self-evaluations, a meta-analysis confirmed the positive

association between core self-evaluations and employee well-being, mostly life satisfaction (Chang et al., 2012). Our study supported and extended previous findings by showing that core self-evaluations also may play a key role in promoting employee flourishing along with life satisfaction. Therefore, the study contributed to the core self-evaluation literature by adding an important well-being outcome, flourishing.

Practical Implications

Based on the present findings, several human resource practices, including leadership development and recruitment/selection could be implemented to enhance employees' job crafting and quality of life, and to reduce negative work behaviors. The job crafting process is likely to appear in organizations where work control and close monitoring of employees are less common. Therefore, organizations may create the environments facilitating employees' job crafting indirectly by adopting a flat or decentralized structure with increased flexibility and empowerment of employees, or more directly by encouraging leaders to display more empowering behaviors. To do this, it may be helpful to develop and offer leader training in behaviors that are considered core characteristics of empowering leadership, such as encouraging self-leadership and participation, conveying confidence, granting autonomy, and enhancing job meaningfulness. As a result, employees can be motivated to perform more job crafting, which ultimately helps build personal resources for living well. Particularly, employee job crafting appeared to play an especially important role in predicting future work-family enrichment, because empowering leadership and core self-evaluations did not directly trigger enrichment between work and family. Organizations can design or implement job crafting interventions that focus on encouraging employees to think about opportunities and techniques they may use to engage in job crafting behaviors.

Human resources managers could also take into account the importance of personal traits and consider candidates' core self-evaluation levels in a selection procedure, as individuals with high core self-evaluations may actively craft their work characteristics and contribute to establishing a healthy and productive workplace. Core self-evaluations strongly predicted general well-being outside the job compared to empowering leadership (results of testing the two alternative models). Because core self-evaluations tend to be stable over time, human resources managers need to take account of the features of core self-evaluations as a screening tool when they hire and select new employees.

Limitations and Future Research

The present study had some limitations. First, the use of self-reported data for the variables may raise the concern of common method bias. However, both using three-time periods of data collection and using control variables that were also measured with the same method reduced potential effects of common methods (e.g., Podsakoff et al., 2012). In addition, self-ratings seem to be an especially appropriate way to assess variables such as core self-evaluations, job crafting, and well-being variables. Second, although we measured variables at three time points over nine months, the design may not provide strong causal inferences among variables. Future research can address this issue by manipulating predictor variables in an experimental or quasi-experimental design. Another, but much less powerful method (Spector, 2019) for examining causation would be to measure the variables at all points in time, looking for changes in the variables over time. If we had measured the study's resources (and other resources) at all points in time, however, we could have examined the resource gain spiral due to resource investment more directly—that is, we could have looked for increases in resources over time. Future research can shed more light on this issue if it measures each resource in our model at

each time point. Such research should also measure additional resources repeatedly, because the principle of resource investment maintains that one resource can be used to enhance other resources, not necessarily enhancing the same resource.

The direct effects of empowering leadership and CSE on three of the criteria (flourishing, life satisfaction, and deviance) leave open the possibility of other mediators in addition to job crafting, variables that were not theorized or measured in the present study. We expected our predictor variables would enhance the employees' ability to job craft. In addition, however, empowering leadership and CSE can make employees more successful on the job (e.g., meta-analyses by Judge & Bono, 2001; Kim et al., 2018). Variables related to job success (e.g., job performance, organizational citizenship behaviors, supervisor and coworker praise, and promotion or advancement) might act as additional mediators in the model, because they are rewards or result in rewards that can enhance the person's lifestyle.

We recommend future studies that still further elaborate the model tested here. For example, we proposed in the introduction that the reason the resources obtained from job crafting can positively affect employees' private lives is that the employees go home feeling happier and more energetic after work. Furthermore, especially for the effects of job crafting on the life satisfaction and meaningfulness outcomes, we expected that meaningfulness would be an explanation. Future research could measure these variables (happiness and energy after going home, and meaningfulness in life) as further mediators in an additional last step in the model. They fit the theme of the present study because they are resources in JD-R theory (e.g., Schaufeli & Taris, 2014), and their addition to a fourth time period in the model would better illustrate the resource gain spiral (e.g., Hobfoll, 1989) than the present study's three-stage model. If positive affect, energy, and meaning are missing key explanatory variables for the effects of crafting, then

testing a model with them included might eliminate or decrease the direct effects for empowering leadership and CSE found in this study.

The present study shed light on the value of the JD-R theory approach to job crafting by showing that both personal and job resources may enable or encourage approach crafting and that approach crafting can have strong relationships with employees' future states and behaviors. Future research can enhance our knowledge about the other major type of job crafting, avoidance crafting. Zhang and Parker (2019) placed these two types of crafting as primary among many types, and therefore comparison of these two types of crafting would be of special importance in the future.

Conclusion

The present study, using a three-wave design over a 9-month period, extended existing findings on the approach dimension of job crafting behaviors. The findings highlighted that empowering leadership and core self-evaluations were significant predictors not only for employees' job crafting behaviors but also for their subjective well-being and deviant behavior, with job crafting mediating some of those relationships. Organizations should pay attention to empowering practices of their leaders and employees' individual resources that could further enhance job and life resources. Job crafting (seeking resources and challenges) can be a useful tool for employees to enrich the relationship between work and family, because leader behaviors and core self-evaluations do not directly affect their work-family enrichment.

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Table 1

Means, Standard Deviations, and Correlations from the Original and Imputed Data

	Variables	*Mean*	*SD*	1	2	3	4	5	6	7	8	9
	1. Empowering Leadership (T1)	3.82	.66									
Original	2. Core Self-Evaluations (T1)	3.79	.65	.46**								
N = 276	3. Job Crafting (T2)	3.55	.65	.34**	.21**							
	4. Work-Family Enrichment (T3)	3.34	1.00	.14*	.08	.26**						
	5. Flourishing (T3)	5.74	.85	.23**	.55**	.24**	.41**					
	6. Life Satisfaction (T3)	5.00	1.54	.20**	.44**	.20**	.48**	.72**				
	7. Deviant Behavior (T3)	1.52	.53	-.19**	-.27**	-.05	.31**	-.03	.07			
	8. Negative Affectivity (T2)	1.45	.59	-.21**	-52**	-.05	.12*	-.19**	-.21**	.34**		
	9. Social Desirability (T2)	3.44	.79	.18**	.30**	.23**	.16**	.29**	.27**	-.15*	-.21**	
	10. Job Position (T2)	.39	.49	-.08	-.15*	-.08	.03	-.04	-.04	.06	.20**	.05
	1. Empowering Leadership (T1)	3.70	.71									
Pooled	2. Core Self-Evaluations (T1)	3.66	.69	.43**								
N =	3. Job Crafting (T2)	3.54	.68	.31**	.26**							
13636-	4. Work-Family Enrichment (T3)	3.31	1.14	.12**	.07**	.22**						
14028	5. Flourishing (T3)	5.61	.95	.22**	.54**	.27**	.42**					
	6. Life Satisfaction (T3)	4.82	1.73	.16**	.41**	.21**	.47**	.72**				
	7. Deviant Behavior (T3)	1.55	.61	-.15**	-.22**	-.02*	.32**	.01	.09**			
	8. Negative Affectivity (T2)	1.73	.81	-.27**	-59**	-.11**	.04	-.29**	-.24**	.21**		
	9. Social Desirability (T2)	3.36	.88	.15**	.23**	.14**	.14**	.27**	.22**	-.14**	-.17**	
	10. Job Position (T2)	.50	.50	-.02**	-.11**	-.08**	.00	-.04**	-.05**	.02**	.05**	.05**

Note. Job Position: nonsupervisory status = 0; supervisory status = 1. **$p < .01$. *$p < .05$.

Table 2

Direct, Indirect, and Total Standardized Effects of Empowering Leadership and Core Self-Evaluations on Outcomes with the Original Dataset in LISREL

Effect from		To	Direct Effects	Indirect Effects	Total Effect
Empowering Leadership	→	Job Crafting	.29**		.29**
	→	Work-Family Enrichment	.08	.07**	.15**
	→	Flourishing	.23**	.06**	.29**
	→	Life Satisfaction	.19**	.05**	.24**
	→	Deviant Behavior	-.18*	-.01	-.19*
Job Crafting	→	Work-Family Enrichment	.25**		.25**
	→	Flourishing	.22**		.22**
	→	Life Satisfaction	.18**		.18**
	→	Deviant Behavior	-.03		-.03
Core Self-Evaluations	→	Job Crafting	.11		.11
	→	Work-Family Enrichment	.10	.03**	.13**
	→	Flourishing	.68**	.01	.69**
	→	Life Satisfaction	.58**	.01	.58**
	→	Deviant Behavior	-.21*	-.01	-.22*
Job Crafting	→	Work-Family Enrichment	.23**		.23**
	→	Flourishing	.09		.09
	→	Life Satisfaction	.08		.08
	→	Deviant Behavior	-.05		-.05

Note. $N = 276$. **$p < .01$. *$p < .05$.

JOB CRAFTING 50

Table 3

Direct, Indirect, and Total Standardized Effects of Empowering Leadership and Core Self-Evaluations on Outcomes in LISREL with the Imputed Dataset

| Effect from		To	Direct Effects	Indirect Effects	Total Effect
Empowering Leadership	→	Job Crafting	$.23^{**}$		$.23^{**}$
	→	Work-Family Enrichment	$.07$	$.05^{**}$	$.12^{**}$
	→	Flourishing	$.13^{**}$	$.06^{**}$	$.19^{**}$
	→	Life Satisfaction	$.08^{**}$	$.05^{**}$	$.13^{**}$
	→	Deviant Behavior	$-.14^{**}$	$-.00$	$-.15^{**}$
Job Crafting	→	Work-Family Enrichment	$.22^{**}$		$.22^{**}$
	→	Flourishing	$.27^{**}$		$.27^{**}$
	→	Life Satisfaction	$.22^{**}$		$.22^{**}$
	→	Deviant Behavior	$-.02$		$-.02$
Core Self-Evaluations	→	Job Crafting	$.19^{**}$		$.19^{**}$
	→	Work-Family Enrichment	$.08$	$.04^{**}$	$.12^{**}$
	→	Flourishing	$.65^{**}$	$.02$	$.67^{**}$
	→	Life Satisfaction	$.53^{**}$	$.02$	$.54^{**}$
	→	Deviant Behavior	$-.19^{**}$	$.00$	$-.19^{**}$
Job Crafting	→	Work-Family Enrichment	$.20^{**}$		$.20^{**}$
	→	Flourishing	$.09$		$.09$
	→	Life Satisfaction	$.08$		$.08$
	→	Deviant Behavior	$-.02$		$-.02$

Note. $N = 14028$. $^{**}p < .01$.
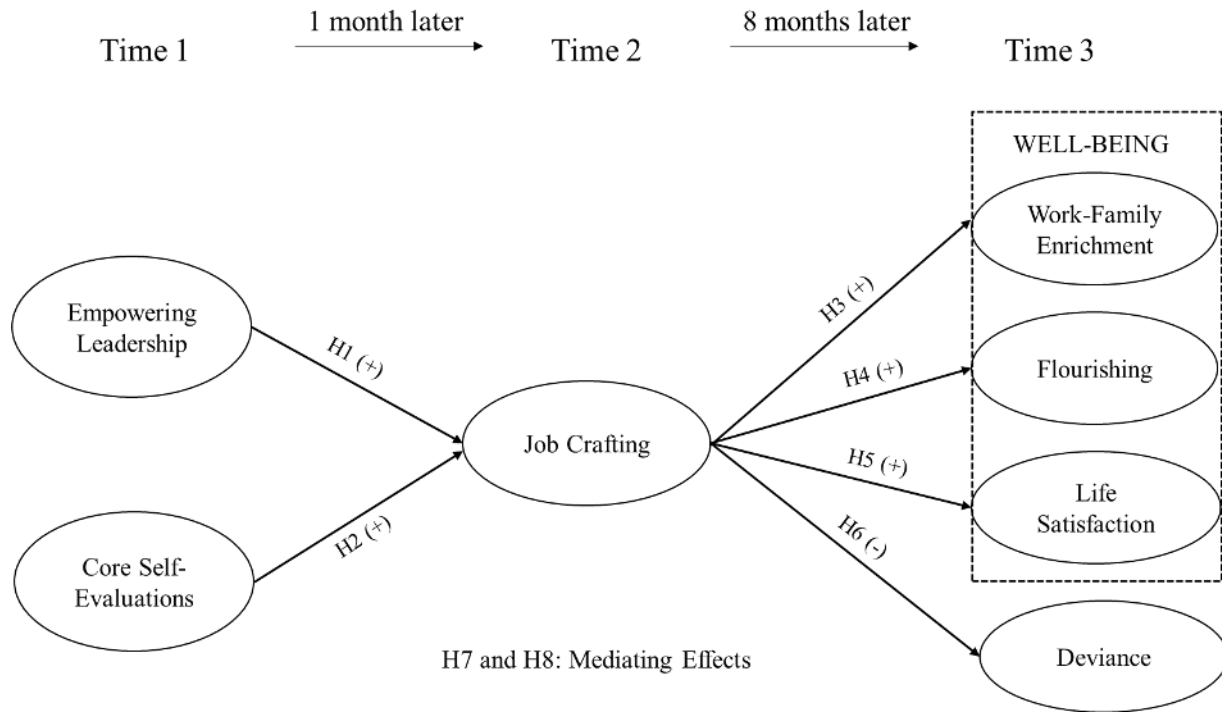
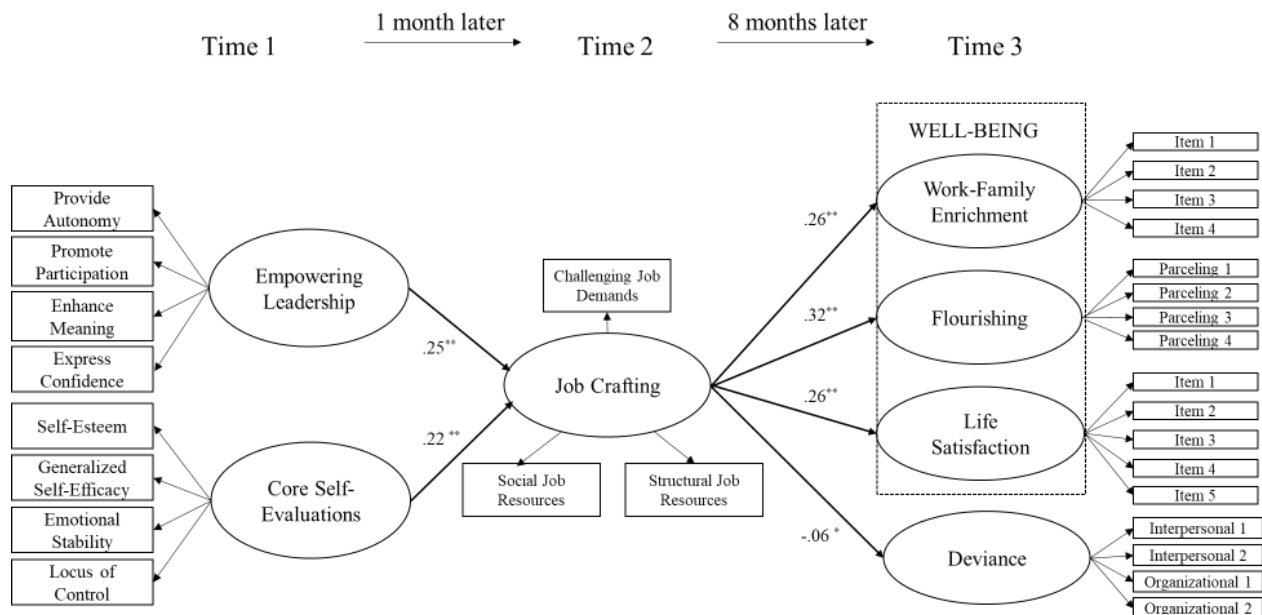*Figure 1*. Hypothesized theoretical model

Figure 2. Structural equation model with standardized coefficients on the imputed data

Notes. Control variables were used in the analyses, but they are omitted from the figure to make it easier to read. $^{**}p < .01$. $^{*}p < .05$.