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# EMPOWERING LEADERSHIP, RESOURCES, CRAFTING, AND OUTCOMES 1

The Power of Empowering Leadership:

Allowing and Encouraging Followers to Take Charge of Their Own Jobs

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#### Abstract

Based on resources theories, the present study examines a serial mediation model, in which empowering leadership predicts employee job crafting through psychological capital (PsyCap) and trust in leader, and job crafting subsequently predicts three different work behaviors: psychological withdrawal, physical withdrawal, and positive work behavior. Data were collected from US employees at four separate points with one-month intervals. Structural equation modeling including testing alternative models was utilized to assess the mediation model. The results generally supported the hypothesized model, suggesting that empowering leadership elicited greater personal and job resources in the form of PsyCap and leader trust, which in turn, led to job crafting behaviors. Subsequently, job crafting made employees engage in more positive work behaviors, as well as fewer psychological and physical withdrawal behaviors. Significant direct effects of empowering leadership and PsyCap on one outcome, psychological withdrawal, were found in some analyses, however. Overall, the findings of the present study underline the importance of personal and job resources for favorable work behaviors by testing the mediating processes.

*Keywords*: empowering leadership; psychological capital; trust in leader; job crafting; withdrawal behavior

# The Power of Empowering Leadership:

# Allowing and Encouraging Followers to Take Charge of Their Own Jobs

In a global and flexible working environment with a rapidly changing labor market, some employees take initiative for their careers and craft their own work roles by seeking selfdevelopment opportunities, such as additional training and challenging assignments, rather than just relying on career paths determined by their organization (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011). Job crafting, defined as employees' self-oriented proactive behaviors to change their work environment to better fit their preferences and abilities (Demerouti, 2014; Wrzesniewski & Dutton, 2001) and to result in psychological resources for the employee (Tims, Bakker, & Derks, 2012), is a potential pathway for organizations to obtain competitive advantage, as well as to motivate employees toward task accomplishment. Despite promising prior research results and the growing emphasis on employees' proactive behavior in organizational studies, the job crafting literature has identified few important theoretical predictors of employee job crafting other than individual differences (e.g., personality) and some specific job characteristics (e.g., job autonomy) (see meta-analysis by Rudolph, Katz, Lavigne, & Zacher, 2017). Although job crafting is by definition a self-initiated activity, organizations can encourage it through their leaders. Leaders can be especially important in job design, and yet research on job crafting to date has paid relatively little attention to the study of leadership, other than one recent study in which transformational leadership led to employee proactivity (seeking resources and challenges) via adaptability (Wang, Demerouti, & Le Blanc, 2017).

From a practical point of view, organizations can benefit greatly from effective leadership and supervision. Leaders may influence a wide range of employee attitudes and behaviors, including job satisfaction, organizational commitment, in-role and extra-role

behaviors, and withdrawal (e.g., meta-analyses by Kim, Beehr, & Prewett, 2018; Lee, Willis, & Tian, 2018). Organizations can attempt to both select (as recommended by Do & Minbashian, 2014 and Lee, Lyyubovnikova, & Knight, 2019) and develop or train (e.g., leader training meta-analysis by Lacerenza, Reyes, Shannon, Joseph, & Salas, 2017) effective leaders.

One aim of the present study is to begin filling some of these gaps regarding the antecedents of job crafting. As illustrated in Figure 1, we propose that empowering leadership predicts followers' psychological capital and trust in the leader, two resources in workplace resource theories (job demands-resources and conservation of resources; Bakker & Demerouti, 2007; Hobfoll, 1989, 2002; Schaufelil & Taris, 2014), as explained subsequently. Psychological capital and trust in leader predict employees' job crafting behaviors, subsequently reducing psychological and physical withdrawal, as well as promoting positive work behaviors. We examined this model by obtaining data from a sample of highly educated workers in the U.S., working in a variety of industries, at four points in time separated by one-month intervals.

Leadership style is an important social contextual component that can play a role in enhancing or reducing an employee's motivation to behave proactively. That is, through empowering leadership, leaders can provide their followers with more or less delegation and resources to craft or customize their jobs. Thus, we propose empowering leadership as a distal antecedent of followers' job crafting. Empowering leadership, the first variable in the model's sequence, refers to a set of leader behaviors that involve influencing followers through collaborative decision making, giving greater autonomy, enhancing the meaning of work, offering developmental support, expressing confidence in high performance, and promoting self-leadership (Amundsen & Martinsen, 2014; Arnold, Arad, Rhoades, & Drasgow, 2000; Zhang & Bartol, 2010). Recent meta-analyses of empowering leadership showed that empowering leader

behaviors may play a vital role in generating intrinsic motivation and psychological resources of employees, resulting in favorable work behaviors. (Kim et al., 2018; Lee et al., 2018). We expect that empowering leadership may also affect employee job crafting behaviors to the extent that it leads to employees' psychological resources. Accordingly, as a first set of mediators and more immediate predictors of job crafting, we propose two psychological resources that may be fostered by empowering leadership: psychological capital and trust in the leader.

Employees' psychological capital (PsyCap) is a psychological state characterized by four personal resources: efficacy, hope, optimism, and resilience; it can change over time and is amenable to training manipulations (Luthans, Youssef, & Avolio, 2007; review by Luthans & Youssef-Morgan, 2017). Some leadership styles, such as transformational leadership and authentic leadership, were positively related to followers' PsyCap (Gooty, Gavin, Johnson, Frazier, & Snow, 2009; Rego, Sousa, Marques, & e Cunha, 2012). We posit that empowering leadership will be particularly likely to increase employees' overall PsyCap however, because empowering leadership more explicitly and narrowly focuses on employee development experiences than other forms of leadership do.

In addition to building followers' PsyCap, empowering leadership can help create trusting working relationships, which we propose as another psychological resource and potential key mediator for understanding how empowering leadership behaviors relate to followers' job crafting activities. Trust in the leader refers to followers' psychological states involving a willingness to accept their vulnerability because of the positive expectations of intentions or future behaviors of their leader (Rousseau, Sitkin, Burt, & Camerer, 1998; Yang & Mossholder, 2010). We propose that trust acts as a mediating mechanism; empowering leadership should directly result in trust, because empowering leadership includes relational-oriented behaviors,

such as treating employees with respect and showing concern for employees, eliciting trust in the leader that can transmit the effects of leadership to employees' job crafting activities. Thus, we examine recent theoretical arguments to examine trust as a mediating psychological resource by which empowering leadership affects employees' behavioral outcomes (Kim & Beehr, 2018a).

In addition to the model's proposals regarding antecedents of job crafting, it also suggests three different types of work behaviors as potential consequences of job crafting: psychological withdrawal, physical withdrawal, and positive work behaviors (Figure 1). Employees' withdrawal behaviors are linked to high organizational costs, and organizations need to control these costly behaviors in order to have an efficient and productive workplace (Sagie, Birati, & Tziner, 2002). Although the relationship between job crafting and positive task performance is well-established (e.g., Rudolph et al., 2017), its relationship with employees' undesirable work behaviors in the form of psychological and physical withdrawal have been examined less. However, by definition, job crafting should result in a job design that fits the employee better (Demerouti, 2014; Tims, Derks, & Bakker, 2016; Wrzesniewski & Dutton, 2001), thereby encouraging them to remain engaged in the work.

Recent studies show evidence for several categories of job crafting (e.g., empirical article by Bruning & Campion, 2018; meta-analysis by Lichtenthaler & Fischbach, 2019; review by Zhang & Parker, 2019), but a commonality among them is an approach-avoidance dimension. Approach crafting is more often related to positive outcomes, while avoidance crafting is usually related to negative outcomes. The present study examines approach crafting and its links with (less) psychological and physical withdrawal as well as with (more) positive work behaviors. Positive work behaviors are similar to but narrower in scope than organizational citizenship behaviors (e.g., Podsakoff, MacKenzie, Moorman, & Fetter, 1990), and they are roughly

associated with the voice mechanism. They consist of volunteering for extra work, working overtime, attempting to alter work environments for the better, thinking of ways to do job better, and negotiating to improve the job (Lehman & Simpson, 1992). Better person-job fit resulting from job crafting should help diminish work stress, which should reduce employee withdrawal behavior (Podsakoff, LePine, & LePine, 2007). Additionally, job crafters are more likely to mobilize their job resources to perform better, which further leads to exhibiting positive work behaviors.

In summary, by integrating principles derived from the resources theories of JD-R and COR, we developed and tested a serial mediation model delineating the role of empowering leadership, PsyCap, trust in the leader, and job crafting to predict employees' favorable and unfavorable work behaviors (Figure 1). This study contributes to job crafting theory by expanding its nomological net in both directions. On the antecedent side, it argues that empowering leadership is a strong theoretical cause of job crafting due to its inherent nature, enhancing the ability of followers to shape their own work. Furthermore, empowering leadership is posited to affect job crafting because it creates two psychological states, PsyCap and trust in the leader, theoretically explaining those effects of the empowering leader on job crafting. On the consequence side, we noted that previous research found crafting related to working longer, harder, or more creatively (e.g., Lehman & Simpson, 1992), and a recent meta-analysis (Rudolph et al., 2017) has summarized the likely consequences of job crafting. Crafting is important because it is related to several outcomes that are valuable to the success of organizations, importantly including multiple types of job performance—self-rated performance, other-rated performance, and contextual performance. The present study argues that job crafting can affect not only generally positive work behaviors, but it also can reduce the tendency for employees to

withdraw physically or psychologically from their work, because it can lead to a fit of the person with the job (e.g., Tims et al., 2016).

# Theoretical Background and Hypotheses

According to JD-R (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014) and COR (Hobfoll, 1989, 2002) theories, resources are psychological characteristics of the employee or the job that can enhance employees' well-being and goal accomplishment. The present study helps to advance knowledge about these theories in two ways.

First, we develop the resource investment tenet of the JD-R and COR theories (e.g., Bakker & Demerouti, 2007; Halbesleben, Paustian-Underdal, & Westman, 2014; Hobfoll, 1989). They first maintain that resources are valued, protected, and sought by employees, because resource depletion can be harmful to the employee's well-being. Second, employees can however, use their resources to obtain other resource. Part of the nature of job crafting is the employee taking charge of their job, which would allow them greater resources (Tims, Bakker, & Derks, 2012). The model in Figure 1 proposes that psychological capital (personal resource) and a trusted leader (job resource) lead to job crafting.

Empowering leadership also fits into these resource theories because Schaufeli and Taris (2014) list leadership as a job resource. They do not specify a specific type of leadership, but we reasoned that empowering leadership illustrates the principle of resources being related to other resources excellently, because empowering leadership is by definition aimed more directly at developing employees (i.e., employees' resources) than other popular leadership styles are. It emphasizes providing autonomy, participation in decision-making, confidence in followers' high performance, and meaningfulness in work. Conceptually, these are closely related to resources such as autonomy, participation in decision making, self-efficacy and organization-based self-

esteem listed by Schaufeli and Taris (2014). With leadership identified as a resource, the model in Figure 1 thus illustrates empowering leadership as a resource leading to psychological capital and trust in leader as resources, which in turn lead to employees' further attempts to increase resources through job crafting.

One resource leading to other resources in the future is consistent with COR theory's principle of resource investment (Hobfoll, Halbesleben, Neveu, & Westman, 2018), in which employees can use their current resources to try to obtain other future resources. The theory suggests this is a continuing process, and therefore it would be best to test more than just two time periods of data; resources should lead to other resources repeatedly, not just once. We were able to test the relationships of resources at an earlier time with other resources at Time 1 to resources at Time 2, with empowering leadership as a resource leading to both a personal (PsyCap) and a job resource (trusted leader), and again from Time 2 to Time 3 where those resources lead to job crafting, which is the employee's attempt to obtain still more resources (Tims et al., 2012). Favorable outcomes should occur from these resources, and these were measured at Time 4.

Second, influential JD-R writers maintain that research has focused too narrowly on negative outcomes, even though the model should be able to predict positive outcomes as well (e.g., Bakker & Demerouti, 2007). They recommend including both positive and negative outcomes in research on resources, and the present study met that recommendation by positing employees' positive work behaviors as well as physical and psychological withdrawal tendencies as outcomes.

Our hypotheses propose stages of a model. The first part of the proposed model predicts that empowering leadership predicts two key followers' resources, one in each resource category

of JD-R theory (Schaufeli & Taris, 2014), psychological capital as a personal resource and a trustworthy leader as a job resource. The higher-order construct of PsyCap can help employees' motivation and perseverance toward goals due to hope of success and to resilience in the face of adversity (Luthans, Avolio, Avey, & Norman, 2007; Luthans, Youssef et al., 2007). The definition of empowering leadership is that the leaders develop the followers by (1) coaching, (2) setting challenging goals, and (3) expressing confidence that their followers can consistently perform well, and in multiple ways (4) encouraging their self-direction and autonomy (Amundsen & Martinsen, 2014; Zhang & Bartol, 2010). This employee development approach to leadership should result in PsyCap by reaffirming followers' beliefs in their abilities (selfefficacy) to cope with challenges and adversity, which leads to generating positive appraisals of their present and future situations (optimism). Indeed, recent studies indicated that empowering leadership was positively associated with followers' sense of self-efficacy (Kim et al., 2018) and a positive outlook on life (Kim & Beehr, 2018b). This occurs because empowering leadership aids employees in solving and coping with problems on the job—experiences that should help employees become more resilient (a part of PsyCap) so they can recognize new opportunities and alternatives, thereby expanding the followers' options of possible solutions to a given problem. This experience can enhance feelings of meaningfulness, competence, self-determination, and impact (Zhang & Bartol, 2010). Therefore, empowering leadership is theoretically related to all the core factors of PsyCap identified by Avey, Hughes, Norman, and Luthans (2008).

H1a: Empowering leadership is positively related to followers' PsyCap.

In addition to fostering followers' psychological capital, empowering leadership is likely to result in followers feeling greater trust in the leader. Leaders who exhibit empowering behaviors may be considered by their followers as having integrity and being reliable (cognitive

trust; Mayer, Davis, & Schoorman, 1995), because leaders' allocation of resources including authority and key decision-making rights to followers may increase their perceptions of the leader's fairness and trustworthiness. At the same time, delegation of responsibility to followers, sharing power, and encouraging self-development are indicators that the leader also trusts them, which represents a positive exchange relationship contributing to reciprocal trust levels between followers and their leader (affective trust; McAllister, 1995). Based on the definition of organizational trust (e.g., Mayer et al., 1995), the employee who trusts the leader is predicting that the leader has the ability, benevolence, and integrity to act in ways that benefit or at least do not harm the employee, when he or she is made vulnerable by taking risks.

H1b: Empowering leadership is positively related to followers' trust in leaders.

Although the model's two psychological resources, PsyCap and trust in leadership, have been linked to positive work behaviors (meta-analyses by Avey, Reichard, Luthans, & Mhatre, 2011; Dirks & Ferrin, 2002), their links with job crafting have yet to be examined. Job crafting is important because it enables employees to balance their job demands and job resources with their personal abilities and preferences, leading to career success and less stress (Kim & Beehr, 2018c; Slemp & Vella-Brodrick, 2014). Through proactive job crafting activities, employees can change task, relational, and cognitive boundaries of their jobs (Niessen, Weseler, & Kostova, 2016; Wrzesniewski & Dutton, 2001).

Task crafting refers to employees altering the scope and/or nature of their current tasks, which allows minimizing negative aspects of the job or maximizing interesting job content; this is related to resources, such as task autonomy, variety, feedback (Schaufeli & Taris, 2014). Relational crafting comprises controlling the quality and amount of interpersonal interactions while doing the job; employees may increase communications with their supervisors and

coworkers as a way of building their network or may decrease social activities to avoid the people they have trouble working with. Relational crafting can involve resources such as more favorable social climate, relationships with supervisor, and social support (Schaufeli & Taris, 2014). Cognitive crafting consists of employees reframing their perceptions and evaluations about their jobs (Niessen et al., 2016; Wrzesniewski & Dutton, 2001), leading to resources such as job motivation and satisfaction with parts of the job (Schaufeli & Taris, 2014). Although a number of job crafting studies have suggested its positive effects on individual and organizational outcomes, its antecedents are not well-explored. We argue that PsyCap and trust in leadership could help explain the willingness to engage in job crafting.

Regarding PsyCap, self-efficacious (part of PsyCap) individuals are self-motivated and set high goals, thrive on challenge, and persevere when faced with difficulties (Luthans, Youssef, et al., 2007). Self-efficacy predicts personal initiative and proactive behaviors similar to job crafting, because employees who have confidence in their capabilities tend to judge that their actions will be successful (Morrison & Phelps, 1999; Parker, Williams, & Turner, 2006). Supporting this reasoning, the meta-analysis by Rudolph et al. (2017) found that self-efficacy was related to job crafting.

Besides the self-efficacy in PsyCap, hope is a motivational state that allows individuals to set realistic but challenging goals; they possess an internal locus of control and the need for achievement (Luthans, Youssef et al., 2017) needed for crafting jobs. Optimistic employees (another facet of PsyCap) are more likely to capitalize on their chances that may contribute to their success; they attribute their success to themselves (Luthans, Youssef et al., 2007). In contrast, when they fail, they relate this failure to environmental causes rather than to their own abilities and behaviors (Luthans, Youssef et al., 2007). These attributions encourage taking risks

to alter their jobs through crafting. Lastly, the resiliency element in PsyCap promotes a focus on the proactive assessment of risks or assets that affect employee outcomes (Luthans, Vogelgesang, & Lester, 2006). Resilient people are more emotionally stable when faced with adversity (Bonanno, Papa, & O'Neil, 2001), are more flexible to changing demands, and are open to new and challenging experiences (Tugade & Fredrickson, 2004) such as job crafting.

*H2a*: PsyCap is positively related to followers' job crafting behaviors.

We also propose that trust in the leader serves as an important resource for employees' behaviors (Dirks & Ferrin, 2002). In the trust literature, employees' proactive behavior in the form of job crafting has rarely been examined, however. This is particularly surprising, given the fact that trust in leader has frequently been explored as a predictor or mediator in relation to various forms of other proactive behaviors, including voice behavior, creativity, and innovation (Gao, Janssen, & Shi, 2011; Newman, Kiazad, Miao, & Cooper, 2014). Trust relationships between leaders and followers may play a major role in promoting proactive job crafting behaviors, considering previous arguments that perception of interpersonal trust encourages employees to make themselves more vulnerable to others and thus facilitates risk-taking behaviors (Colquitt, Scott, & LePine, 2007; Mayer et al., 1995; Rousseau et al., 1998), including job crafting.

*H2b*: Trust in leader is positively related to followers' job crafting behaviors.

Regarding the model's criteria, we propose that employees with increased fit with their work environment, which is created by job crafting, will show enthusiasm in their jobs and behave in ways that benefit their organization and/or other employees through engaging in greater positive work behaviors and fewer withdrawal behaviors, psychologically and physically. Employees' job crafting behaviors involve a focus on the job, such as trying out new work

procedures and activities. Furthermore, employees can change the level of their job demands and resources to help maintain their energy and motivation (Wang, Demerouti, & Bakker, 2017), which will likely help them react to stressful situations with positive attitudes rather than withdrawing from work.

Positive work behaviors are voluntary behaviors that are above and beyond what is required of the employees to promote work effectiveness, and includes such things as doing additional work and trying to change work conditions or thinking of better ways to do the job (Lehman & Simpson, 1992). Job crafting allows employees to adjust their job demands and conditions in order to make their job more motivating. Thus, employees who successfully craft their job will likely persist with extra effort and be more willing to volunteer suggestions for improvement.

Withdrawal has not been examined previously in regard to job crafting. The construct of employee withdrawal is broad (Hulin, 1991), but two different forms of withdrawal are examined in the present study: psychological withdrawal and physical withdrawal behaviors. Psychological withdrawal involves employee acts that provide a mental escape from work (Hulin, 1991). Although employees are physically present, their minds may not be on their work, showing behaviors such as daydreaming, chatting excessively with co-workers, giving little attention to the job, and spending time working on personal matters rather than work-related issues (Lehman & Simpson, 1992). Physical withdrawal represents behaviors such as physical avoidance of the workplace (e.g., leaving work early or taking longer breaks). These actions obviously harm organizations by reducing productivity, work group morale, and overall effectiveness (Lehman & Simpson, 1992; Sagie et al., 2002).

H3a: Job crafting is negatively related to followers' psychological withdrawal behaviors.

H3b: Job crafting is negatively related to followers' physical withdrawal behaviors.

*H3c*: Job crafting is positively related to followers' positive work behaviors.

These hypotheses were tested simultaneously by examining the model in Figure 1. The model is somewhat complex, containing 10 instances of mediation. It therefore inherently hypothesizes, and we test the following:

H4a: There is serial mediation in which PsyCap, trust in the leader, and job crafting mediate the relationship of empowering leadership with the followers' three work behaviors (psychological withdrawal, physical withdrawal, and positive work behaviors). H4b: On the left side of the model, PsyCap and trust in leader simultaneously mediate the relationship of empowering leadership with the followers' job crafting. H4c: On the right side of the model, job crafting mediates the relationship of PsyCap and trust in leader with the followers' three work behaviors (psychological withdrawal, physical withdrawal, and positive work behaviors).

## Methods

# Participants and Procedure

Participants were full-time employees in a variety of industries (e.g., sales, finance, and technology) and occupations (e.g., manager, teacher, nurse, and IT engineer); they were recruited and paid through TurkPrime, an online crowdsourcing platform that allows researchers to implement longitudinal studies, control who participates in a study, and monitor dropout rates and completion times (Litman, Robinson, & Abberbock, 2017). TurkPrime also makes it possible to include eligible participants from a broad range of jobs, people, and geographic locations.

Recent studies have suggested that MTurk workers tend to read survey instructions carefully, and the samples have diversity in terms of age, education, and work experience, providing high-quality data that are comparable to those from other data sources (Goodman, Cryder, & Cheema, 2013; Kees, Berry, Burton, & Sheehan, 2017). We required respondents to be full-time employed adults aged 18 and older working in the US, and holding a 95% approval rating from previous MTurk assignments; those MTurk workers are rated by researchers as especially conscientious and reliable (Casler, Bickel, & Hackett, 2013; Peer, Vosgerau, & Acquisti, 2014). Although research showed there may be no need to examine their data with insufficient-attention checks, we nevertheless took the precaution of following several procedures to control the quality of the data (Cheung, Burns, Sinclair, & Sliter, 2017; DeSimone, Harms, & DeSimone, 2015). We deleted data from participants answering too many consecutive questions with the same response, having greater than 30% missing data, completing surveys four times faster than the average respondent, answering attention-check questions incorrectly, and giving the same answers on several reversed-wording questions as items with nonreversedwording.

We collected data at four separate time points with one-month lags in order to measure variables in the causal sequence implied by the model in Figure 1. This reduces the likelihood that alternative models with reverse causation account for the results, and this technique is also recommended to reduce the effects of common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). In the first survey, employees provided information on their demographics and perceptions of empowering leadership. At time 2, we asked the employees about their level of psychological capital and level of trust in leader. At time 3, we asked employees about their job crafting behaviors. In the final survey, employees provided ratings on the three types of work

behavior outcomes of psychological withdrawal, physical withdrawal, and positive work behaviors.

Because the sample was drawn from the high-reliability TurkPrime source, very little low-quality data were encountered to be eliminated. Initially, 700 employees completed the first survey. Among them, 38 (5%) were excluded because of partial completions and non-purposeful and low effort responses, leaving usable data from 662 respondents to the first survey. In the second wave, we sent an invitation email to those 662 participants and received 554 usable responses; 26 (5%) of them were dropped due to low effort responding and failed attention checks. Thus, 528 participants were invited to the third survey one month after the second survey. Of these, 418 completed the third survey, but 9 (2%) cases were deleted due to failed attention checks. Of those 409 employees, 334 employees participated in the fourth wave survey.

After eliminating 3 (1%) cases due to mismatched codes across the four surveys, we used a sample of 331 participants to test the hypotheses: 54.4% were male, 81.5% were white, and 68.5% had at least a bachelor's degree. The mean age of participants was 39.44 years (SD = 11.26), they worked an average of 40.25 hours per week (SD = 7.66), and they had been in their current organization for an average of 7.91 years (SD = 7.67). Of these, 40.9% were line employees, 41.2% supervisors, 7.0% managers, 3.7% upper managers or executives, and 7.2% others (e.g., support staff). Overall, the sample was much more educated than the U.S. national population (30.9% bachelor's degrees in 2017; U.S. Census Bureau, 2017a); it was also slightly more male (49.2% in the U.S. in 2017; U.S. Census Bureau, 2017a) and a little older (37.8 median in 2017; U.S. Census Bureau, 2017b). Finally, the present sample consisted of proportionately more Whites than the U.S population (76.6% in 2017; U.S. Census Bureau, 2017a). The demographics of the sample are in Appendix A.

We also examined whether the final sample (Time 4) was representative of the Time 1, Time 2, and Time 3 samples by comparing demographic differences. We found only small differences with respect to demographic variables assessed at Time 1, Time 2, Time 3, and Time 4 (gender, race, age, working hours, and education); the percentage of male and white participants increased somewhat across the four surveys; 46.5% to 54.4% for male, and 76% to 81.5% for white. Age of the participants also increased from M = 38.69 to M = 39.44. Additionally, an average of working hours per week increased slightly (39.74hrs to 40.25hrs). Finally, the percentage who had a bachelor's or higher degree increased from 63.7% to 68.5%. Additionally, we conducted a dropout analysis from Time 1 to Time 4 using multiple logistic regression as recommended by Goodman and Blum (1996). For predictors, we used demographic variables and the only variable in the model with data available at Time 1 (empowering leadership). Only gender uniquely differed from Time 1 to Time 4 (Table 1), with the final sample containing a larger proportion of females than the original sample; this is opposite from the bivariate results, probably a suppressor effect due to multicollinearity among the predictors. Overall, although there was attrition in our sample across the four surveys, it does not seem that there exists any severe systematic sample bias developing over the course of the study. Measures

The items of all scales in the study are in Appendix B. One variable from this dataset was used in a different study presented at a conference (anonymized).

Empowering leadership (T1) was measured using Ahearne, Mathieu, and Rapp's (2005) 12-item measure ( $\alpha$  = .93). It consisted of four subdimensions: autonomy (e.g., "My supervisor allows me to do my job my way"), participation in decision making (e.g., "My supervisor makes many decisions together with me"), confidence in high performance (e.g., "My supervisor

expresses confidence in my ability to perform at a high level"), and meaningfulness of work (e.g., "My supervisor helps me understand how my objectives and goals relate to that of the company"). Respondents rated items rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Psychological capital (T2) was measured using the Psychological Capital Questionnaire (PCQ) developed by Luthans, Youssef et al. (2007). We used the shorter 12-item ( $\alpha$  = .92) version of the PCQ, which has been shown to be reliable and valid in prior studies (e.g., Avey, Avolio, & Luthans, 2011; Luthans, Youssef, Sweetman, & Harms, 2013). The PCQ-12 includes three items to measure self-efficacy (e.g., "I feel confident in representing my work area in meetings with management"), four to measure hope (e.g., "If I should find myself in a jam at work, I could think of many ways to get out of it"), three to measure resilience (e.g., "I can get through difficult times at work because I have experienced difficulty before"), and two to measure optimism (e.g., "I always look on the bright side of things regarding my job"). Items were measured on a 6-point Likert scale ranging from 1 (totally disagree) to 6 (totally agree).

Trust in leader (T2) was assessed using Robinson and Rousseau's (1994) 7-item scale ( $\alpha$  = .94). An example item is "I am not sure I fully trust my supervisor (reversed coded)" rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Job crafting (T3) was measured with the 9-item scale ( $\alpha$  = .81) developed by Niessen et al. (2016). The scale captures three dimensions of job crafting behaviors: task crafting (e.g., "I undertake or seek for additional tasks"), relational crafting (e.g., "I look for opportunities to work together with people whom I get along well with at work"), and cognitive crafting (e.g., "I find personal meaning in my tasks and responsibilities at work"). These elements of job crafting map onto some of the resources in JD-R (e.g., autonomy, relationship with supervisor, and

satisfactory evaluation of job elements; Schaufeli & Taris, 2014), and the items primarily indicate approach crafting (Lichtenthaler & Fischbach, 2019; Zhang & Parker, 2019) to obtain resources exemplified in Schaufeli and Taris (2014). Respondents rated each job crafting behavior on a 5-point scale from 1 (not at all) to 5 (absolutely).

Work behaviors (T4) were measured using Lehman and Simpson's (1992) 17-item scale. With a 7-point frequency scale from 1 (never) to 7 (everyday), respondents were asked to indicate how much they performed on-the-job behaviors, including psychological withdrawal, physical withdrawal, and positive work behaviors. Example items include "In the past three months, how often have you "...daydreamed on the job?" (psychological withdrawal; 8 items;  $\alpha = .82$ ), "...left work early without permission?" (physical withdrawal; 4 items;  $\alpha = .80$ ), and "...volunteered to work overtime?" (positive work behaviors; 5 items;  $\alpha = .84$ ).

Social desirability (T2) was measured as a potential control variable for the self-reports of the outcome variables, because employees may tend over-report their good and under-report their bad behaviors. In addition, because psychological capital might be contaminated with social desirability, we also controlled for it at that point in the model as well. The five-item ( $\alpha = .78$ ) Socially Desirable Response Set (Hays, Hayashi, & Stewart, 1989) was used to measure social desirability. An example item is "There have been occasions when I took advantage of someone" rated on a 5-point scale from 1 (definitely true) to 5 (definitely false).

## **Results**

Table 2 presents descriptive statistics, reliabilities (.80 to .94), and zero-order correlations. All correlations corresponding to the paths in the hypothesized model were significant at p = .00. Empowering leadership was positively related to the first set of mediators, psychological capital (r = .58) and trust in leader (r = .60). The two mediators at the first stage of

the model were significantly related to the mediator at the second stage of the model, job crafting (r = .47 and r = .36 respectively), and job crafting was significantly related to all three criteria: psychological withdrawal behaviors (r = -.21), physical withdrawal behaviors (r = -.19), and positive work behaviors (r = .37).

### Measurement Model

We used LISREL 8.8 (Jöreskog & Sörbom, 2006) to obtain model fit and parameter statistics. The model consisted of seven variables comprised of 57 items, which were too many items to allow a viable CFA at the item-level with our limited sample size (n = 331). CFA based on subscales is often recommended (Hoyle, 2012), and we were able to do that with the three variables that had subscales: empowering leadership, psychological capital, and job crafting. For trust in leader, psychological and physical withdrawal, and positive work behavior, however, there were no subscales, and we therefore relied on the item parceling method (e.g., Little, Rhemtulla, ibson, & Schoemann, 2013; Matsunaga, 2008). Accordingly, for the empowering leadership, psychological capital, and job crafting constructs, subscales were used as indicators to form latent variables. The 7-item measure of trust in leader had no subscales, and the item parceling method was applied (Little et al., 2013; Matsunaga, 2008); its seven items were randomly parceled to form three indicators of a latent variable (two consisting of two items each and one of three items). Similarly, psychological withdrawal and positive work behaviors were unidimensional constructs, and their items were randomly parceled to create three indicators; the 8 items of psychological withdrawal behaviors were randomly parceled (two consisting of three items each and one of two items), and the 5 items of positive work behaviors were randomly parceled (two consisting of two items each and one of a single item). Finally, physical

withdrawal behaviors also had no subscales and only four items; its four items, therefore, served as indicators.

Table 3 shows all the model fit indices. Pertaining to the measurement model or confirmatory factor analysis (CFA), the results provided support for the 7-factor model indicating the distinctiveness of the seven constructs used in the study,  $\chi^2(231, N=331)=731.74$ , p<.01; CFI = .95; IFI = .95; NNFI = .93; RMSEA = .08. We also tested an alternative, one-factor solution for the measurement model, but it produced a significantly poorer fit than the 7-factor model  $\chi^2(252, N=331)=3306.30$ , p<.01; CFI = .72; IFI = .72; NNFI = .69; RMSEA = .19, with a chi-square difference of  $\Delta\chi^2(21, N=331)=2574.56$ , p<.01 in comparison to the hypothesized model. The indices showed evidence that the 7-factor model had a good fit, and therefore, we further examined the hypothesized structural model from Figure 1.

Hypothesized Model and Effects of Controls

The model fitted the data adequately,  $\chi^2(245, N=331)=828.02$ , p<.01; CFI = .93; IFI = .94; NNFI = .93; RMSEA = .08. Figure 2 presents the overall structural model with standardized path coefficients. All paths in structural model analysis were significant at p=.00. Empowering leadership was positively related to psychological capital ( $\beta=.71$ ) and trust in leader ( $\beta=.66$ ), supporting Hypotheses 1a and 1b. The results also supported Hypotheses 2a and 2b, that psychological capital ( $\beta=.44$ ) and trust in leader ( $\beta=.33$ ) would be positively related to job crafting. Hypotheses 3a, 3b, and 3c were also supported, because job crafting was negatively related to psychological ( $\beta=-.43$ ) and physical withdrawal ( $\beta=-.25$ ), and positively related to positive work behavior ( $\beta=.42$ ).

Finally, we reran the model with some control variables. First, controlling for social desirability did not affect the substantive results. Second, the Method section noted that there

were a few demographic differences between the sample at time one and the final sample at time four. Although the demographic differences were minor, we examined their relationships with the substantive variables in the model. There were only two significant relationships between demographics and the variables in the model; gender was related to job crafting (r = .19, p = .00) and physical withdrawal (r = -.12, p = .02). We tried the model again, using these variables as controls, but as would be expected from these weak correlations, the model was not affected. Overall, the model was quite robust in regard to both social desirability and demographics as individual differences.

#### Alternative Models and Mediation

The fit of the overall model is consistent with the hypothesized mediation model. However, for further evidence about mediation, we tested four alternative models along with bootstrap confidence intervals. This analysis was used to test whether the indirect pathways were significant, with the standard errors from sampling distribution estimated using 5,000 bootstrap resampling from the original sample. That was used to calculate 95% confidence intervals (CI) for the indirect effects. Significance of the mediation was indicated if the upper and lower limits of 95% CI did not include zero. First, three direct paths were added from empowering leadership to the criteria (alternative model 1); the additional three paths for alternative model 1 did not change fit indices very much (Table 3), and they produced a statistically significant improvement in the chi-square,  $\Delta \chi^2(3, N=331)=28.82, p <.01$ . The fit improvement was due to one of the three paths: There was a significant direct link only from empowering leadership to psychological withdrawal behavior,  $\beta = -.39, p = .00$ , CI  $_{95\%} = [-.56, -.18], p = .00$ . Therefore, Hypothesis 4a was partially supported. Second, we tested whether empowering leadership had direct effects on employee job crafting (alternative model 2). No significant direct link was

found between empowering leadership and job crafting,  $\beta = .11$ , p = .23, CI  $_{95\%} = [-.10, .31]$ , p = .29. however, emphasizing the mediating roles of psychological capital and trust in leader, and supporting Hypothesis 4b. We also tested whether job crafting was an important mediator linking the first two mediators to the criteria. For alternative model 3, we added three direct paths from psychological capital to the three work behaviors, and it fit better than the original model,  $\Delta \chi^2(3, N=331)=17.85$ , p=.00. Again, the improvement in fit was due to the same outcome, psychological withdrawal behavior,  $\beta = -.32$ , p=.00, CI  $_{95\%} = [-.51, -.13]$ , p=.00. Alternative model 4 added three direct paths from trust in leader to the criteria, and it also showed improved fit over the original model,  $\Delta \chi^2(3, N=331)=24.11$ , p=.00. Again, this improvement was due to a path leading to the same outcome, psychological withdrawal behavior,  $\beta = -.32$ , p=.00, CI  $_{95\%} = [-.50, -.11]$ , p=.02. Except one fit index,  $\Delta$ CFI = .01 in alternative model 1, 3, and 4, fit indices were unchanged at the second decimal point by the alternative models (Table 3). Therefore, Hypothesis 4c was partially supported.

The LISREL results of direct and indirect effects using latent variables are reported in Table 4. If the indirect effect is equal to the total effect, only an indirect effect exists; this analysis shows no direct effects anywhere in the original hypothesized model, providing strong support for mediation. In four alternative model tests, a bootstrapping procedure also provided support for the indirect effect of empowering leadership on physical withdrawal and positive work behavior through psychological capital, trust in leader, and job crafting. There were some direct links in the three alternative models though; one criterion, psychological withdrawal behavior, had a direct effect on empowering leadership, psychological capital, and trust in leader; their 95% CIs did not include a zero.

Overall, these analyses suggested that psychological capital and trust in leader in the first part of the model and job crafting in the second part of the model may be critical intervening variables linking empowering leadership to the three types of work behaviors, possibly with direct effects on employee psychological withdrawal behavior.

#### **Discussion**

The aim of the present study was to examine whether resources theories (JD-R and COR) could help explain the relationship of empowering leadership with followers' positive as well as negative reactions (psychological and physical withdrawal, and positive work behaviors). In line with the tenet of gain spirals, empowering leadership as a resource predicted two other employees' resources (psychological capital and trust in leader), which then predicted job crafting.

Support for the model helps boost the idea of employees investing resources to potentially result in other future resources, the type of accumulation proposed in COR theory and the JD-R model (e.g., Hobfoll, 2002; Schaufeli & Taris, 2014). We note that these resources vary across employees to begin with, and for many employees it would mean improving some level of resources they already have. For those with a lot of such resources, those who already have high self-efficacy and optimism found in psychological capital for example, the resources may be unlikely to be developed much further, but for other employees the effects might be more dramatic.

Support for the model reinforces the key roles of the two positive psychological resources in employees' job crafting activities, given there was no significant direct effect of empowering leadership on job crafting. Additionally, the study contributes by providing insight into the antecedents of job crafting, because most studies on job crafting focused on its potential

consequences: PsyCap and trust in leader explain the link between empowering leadership and job crafting. Together, our findings suggested that although job crafting, as an individual process, may not be directly influenced by particular leadership behaviors, but it may depend on employees' psychological resources that can be a result of empowering leadership. We interpret the mediation by job crafting as indicating that the crafting employee is using the resources provided by the leader.

Regarding the outcomes, the present study contributes to the JD-R literature by including both positive and negative outcomes, as recommended by Bakker and Demerouti (2007) and also to the job crafting literature by adding new behavioral outcomes to it, psychological and physical withdrawal behaviors. Employee withdrawal can cause a financial burden for the organization (e.g., Hancock, Allen, Bosco, McDaniel, & Pierce, 2013), and thus it is important to identify potential factors that help prevent employee withdrawal from occurring. Job crafting is one of those factors. According to the JD-R model (Bakker & Demerouti, 2007), access to sufficient job resources protects employees against strains (Schaufeli, Bakker, & Van Rhenen, 2009); theoretically, strain and work stressors, especially hindrance stressors, lead to negative emotions, which eventually translates into coping attempts in the form of psychological and physical withdrawal from work (Podsakoff et al., 2007). Job crafting can prevent this sequence of events, by crafting the job so that such job stressors are less likely and resources to cope with them are more likely to be present.

Job crafting also directly predicted employees' positive work behaviors. This result supported the idea that employees with more resources are likely to be more involved in their work roles and display extra-role behaviors (e.g., Bakker & Demerouti, 2014; Demerouti, Bakker, & Gevers, 2015). Job crafting includes using job resources to facilitate work goal

achievements, and it helps employees change their jobs to be able to better to perform them, in part by defining the job as doing more tasks they are good at (fit that can result in interesting or rewarding work). As a result, employees who successfully craft their job characteristics are willing to invest increased resources in their tasks, such as persisting and doing extra work and thinking of ways to do the job better. The job crafting activities, therefore, help make employees feel motivated and better at their job, resulting in more engagement in positive work behaviors. Overall, regarding outcomes of job crafting, a number of studies have focused on favorable work behaviors, such as task performance, work engagement, and organizational citizenship behavior (Bakker, Tims, & Derks, 2012; Demerouti et al., 2015; Tims, Bakker, & Derks, 2015), but they have not paid attention to how job crafting can be linked to employees' withdrawal behaviors. Our findings bridged this gap and showed that job crafting led to not only positive forms of work behaviors but also may have helped inhibit employees from engaging in psychological and physical withdrawal behaviors.

In some analyses, one outcome, psychological withdrawal, stood out as potentially being directly predicted by every predictor variable in the model. This was surprising, but it suggests how easily employees can be distracted from work while still being physically present on the job. That is, they can become disengaged psychologically, even to the point of being engaged in nonwork activities while on the job, and multiple factors may each have their independent effects on such disengagement. Psychological withdrawal may be easier to "get away with" than physical withdrawal such as leaving work early, and thus employees may be particularly free to engage in this response to many work situations. Therefore, less empowering leadership or resources such as PsyCap and trust is enough to encourage psychological withdrawal, just as (less) job crafting is. To some extent, the much larger variance in psychological withdrawal (SD = 1.25) than in

physical withdrawal (SD = .77) shown in Table 2 supports the idea that psychological withdrawal may be less restricted by the workplace environment than physical withdrawal is. Practical Implications

Based on present findings, human resource practices could be implemented to enhance employees' resources and favorable work behaviors. Empowering leadership behaviors that provide followers with freedom, mentorship, and opportunities to think and behave independently, play significant roles in the followers' psychological capital and trust in the leader and eventually in psychological withdrawal behaviors. That is, the two psychological resources can be fostered in followers by leaders who interact (work) closely with them. One way organizations can facilitate this process is to develop HR practices that encourage empowering leadership behaviors through a reward system (e.g., advancement of empowering leaders). Additionally, developing selection tools to identify and select leaders who will likely show empowering behaviors would be a feasible strategy. Organizations can also invest in empowering leadership training programs for existing leaders in order to improve their empowering behaviors. Organizations that obtain, promote, reward, and train more empowering leaders may benefit from the desirable outcomes of higher employee PsyCap and trust derived from the empowering leadership style.

In addition, to stimulate self-initiated job crafting behaviors, which leads to positive behavioral outcomes, it is important for leaders to pay attention to the level of followers' psychological capital and extent to which they are trusted by followers. Leaders could build trusting relationships through such behaviors as treating followers with concern for their needs, conveying confidence, collaborative decision-making, and offering developmental support.

Assigning challenging work along with enhanced supportiveness of the work environment also

helps increase employees' psychological capital and motivation to engage in job crafting. That means employees who have higher levels of psychological resources can use those resources and effectively craft their own work environments. Overall, creating work environments where employees actively engage in job crafting behaviors could be an effective way to contribute to a productive workforce and simultaneously decrease withdrawal behaviors.

#### Limitations and Future Research Directions

The study also has some limitations that should be noted. These are both limitations and opportunities for valuable future research.

Generalizability. The sample was highly educated and had a high proportion of employees reporting themselves as white, and so the results may apply best to white, professional, technical, and supervisory employees, for example. Although controlling for such individual differences had no substantive effect on the model in the present data, future research could examine the model for people of varied ethnicities and those who are less educated in order to further test its generalizability.

Methods and measures. The different times of measurement helped to reduce effects of common method variance (Podsakoff et al., 2012), but it was unlikely to be totally eliminated. To further minimize problems associated with common method bias, future research could utilize other methods; positive work behaviors could be rated by another source such as coworkers or supervisors, for example. This would be especially useful for some of the more behavioral constructs, such as the physical withdrawal and positive work behavior criteria. Others in the workplace might be able to observe and report such behaviors as a check on the accuracy of the self-reports. Other variables in the model tap constructs that are inherently intrapsychic however, and they are less amenable to observation by others (e.g., psychological

withdrawal such as daydreaming, or PsyCap, which is primarily cognitive resources or internal states; Peterson & Seligman, 2003; Luthans, et al., 2007).

Related to common method variance, there could also have been a method issue of social desirability; we especially note that the wording of the PsyCap items might invoke some desirable responses (e.g., "I always look on the bright side of things regarding my job"), and the self-reporting of outcomes such withdrawal and positive work behaviors might be susceptible to desirable responding. When we controlled for social desirability at these points in the model, however, the conclusions remained unchanged. We also found several other studies controlling various personality characteristics that have only modest effects on PsyCap, but we found only one previous study using social desirability as a control variable; the study predicted safety climate from PsyCap. In a maritime industry study, social desirability was correlated .30 with PsyCap, but it had no unique effect when entered into a multiple regression along with age and rank (Bergheim, Nielsen, Mearns, & Eid, 2015). We note also the argument that controlling for social desirability is not always appropriate for some predictor variables. The issue is that some positive constructs such as PsyCap are socially desirable, and therefore controlling for social desirability would be, in part, controlling for the very construct one is studying (e.g., Avey et al., 2011; Peterson & Seligman, 2003). That is, social desirability in this case would not only control partially for a type of responding (a *method* effect) but would also mistakenly control partially for the *construct* being studied, which would be inadvisable. A similar issue has been noted in other research domains (e.g., Spector, Zapf, Chen, & Frese, 2000; in regard to controlling for negative affectivity while studying psychological strains in the occupational stress domain).

Finally, although we measured the variables at four separate time points in a sequence matching their theoretical causal progression, causal relationships cannot be guaranteed in the

study. The best way to do that would be to manipulate each variable in the first three phases of the study as independent variables in multiple studies with experimental designs. For example, the easiest of these variables to manipulate is probably empowering leadership. Experiments could manipulate empowering leadership by implementing leader training programs, with random assignment of leaders to training and control groups, in order to determine whether empowering leadership causes trust in leaders or psychological capital.

Aside from experiments, however, research on the model also could have measured all seven variables at all four time points. First, this would allow controlling for the criterion variable from a prior time point when examining relationships at each of step of the model, so that effects of stability in the outcome variables would be reduced. This would have helped to more directly test the concept of "gain" spirals, because it could demonstrate a gain in mean scores from one time period tot next. Second, if all variables were measured at all time points, the potential for reverse causality could be estimated. Although causality still could not be strongly inferred, some potential alternative causal directions could be compared to the proposed model.

Facets of job crafting. We adopted the conceptualization and measure of job crafting by Niessen et al. (2016), who defined job crafting as a form of proactive behaviors that involve employees initiating changes in their task, relations, and cognitions. However, there are other prominent alternative conceptualizations of job crafting (e.g., Petrou, Demerouti, Peeters, Schaufeli, & Hetland, 2012; Tims et al., 2012) focusing on multiple job resources and demands in JD-R theory, and future research could test our model with those forms of job crafting. There are also recent articles explicating still other multiple dimensions of job crafting (e.g., Bruning & Campion, 2018; Lichtenthaler & Fischbach, 2019; Zhang & Parker, 2019), but one dimension

they have in common is approach-avoidance crafting (although different labels are sometimes used). The measure in the present study was primarily an approach measure ("proactive" according to Niessen et al., 2016), and it was negatively related to withdrawal and positively related to positive work behavior. Future research could be aimed at discovering how other types of job crafting are related to these outcomes.

We also note that the widely used Tims et al. (2012) measure and conceptualization of job crafting include subscales intended to measure employee attempts to change (increase or decrease) the job's challenge and hindrance demands, but some of its subscales (especially changing hindrance demands) may have unresolved problems. The problems concern convergence and divergence with the other subscales, as well as weak or theoretically unexpected relationships with outside variables (meta-analysis in Rudolph et al., 2017). Future research could examine an expanded set of job crafting facets; a first step might be examining similarities and differences of Niessen et al.'s (2016) task, relations, and cognitions crafting with Tims et al.'s (2012) crafting of increasing or decreasing job challenges and hindrances. This would need to be preceded, however, by further examination and development of the Tims et al (2012)'s measure.

Negative as well as positive leadership might be important. Despite increasing attention on employee job crafting and its positive effect, insufficient empirical studies have addressed crafting in relation to leadership styles. Therefore, another promising area for future studies would be to consider various other leadership styles in relation to job crafting. This includes not only positive leadership (e.g., authentic and ethical leadership) that could promote crafting, but also the dark side of leadership (e.g., authoritarian leadership and abusive supervision) that could discourage such self-initiated behaviors.

Regarding positive leadership styles, one promising avenue would be to examine the relationship between empowering leadership and leader-member exchange relationships (LMX). LMX consists of two-way respect between a leader and a specific follower, trust in each other's good character, and the belief that the other has benevolent intentions toward one's self (e.g., Liden, Sparrowe, & Wayne, 1997). One link in our model was from empowering leadership to trust in the leader, a small part of LMX, and this may suggest that empowering leadership could result in LMX. One previous study has shown the LMX may mediate or in some instances moderate links between empowering leadership and employees' experiences of psychological empowerment (Kwak & Jackson, 2015).

More negative leadership styles (e.g., abusive leadership and authoritarian leadership), might result in very different attempts to alter one's job. Job crafting is almost always considered beneficial to both the person and the organization, because it comprises changing the job to better fit the person—to fit either their capabilities or their temperaments. Negative leadership styles, with abusive leadership being a strong example, might lead to less job crafting, or instead it might lead specifically to fewer attempts at job crafting that are clearly beneficial to both the organization and the person. That is, an employee might try to change the job in ways that are more self-protective than productive. If we call such actions job crafting, the crafting might result in less positive work behaviors. Examples could include increased attempts to divert blame away from one's self for errors, designing tasks and engaging in tasks that avoid contact with the supervisor, or passive-aggressive work sabotage as forms of retaliation for aversive supervision. These actions would not be beneficial for the organization, but the issue has not been seriously considered in the job crafting literature.

Individual differences may matter. Not all employees want to engage in job crafting, and there may be many reasons for this. For one thing, a job might already fit the employee just right, and he or she would see no need or advantage to changing it. In addition, individual differences might make some employees more prone to engage in crafting than others. Employees with proactive personalities are more prone to try to take charge of their jobs through crafting (meta-analysis by Rudolph et al., 2017). Those who are high in need for achievement might be prone to craft their jobs in specific ways—to allow a greater opportunity to achieve challenging and important goals; on the other hand, if those who are low in need for achievement engaged in job crafting, they might prefer to craft their job to have less challenging goals. Besides stable individual differences, recent experiences might matter; employees who had negative experiences with job crafting in the past would likely be less apt to want to try it again. All of these suggest future research could examine why some employees might engage in job crafting more than others or why they might engage in different types of job crafting.

## Conclusion

Research on job crafting has flourished over the past decade. However, we still lack a very complete understanding of the role of leadership and other variables as antecedents of job crafting. Part of job crafting is the employees' attempts to develop more resources; the present study therefore used principles of resources theories to develop and test a model, using a four-wave design, integrating job crafting principles with empowering leadership, and employees' personal and job resources to explain potential effects on both favorable and unfavorable outcomes. We hope that our findings can be useful moving forward to understand how to promote employee job crafting using principles from workplace resources theories.

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Table 1
Logistic Regression: Stayers (Time 4) vs. Leavers (Time 1)

Variable	b	s.e.	
Empowering Leadership	.02	.14	
Gender	89**	.18	
Race	10	.07	
Age	.00	.01	
Work Hour	.01	.01	
Education	.02	.10	
Constant	.94	.81	
Nagelkerke R-square	.07		
-2 log likelihood	739.89		
Model Chi-square	30.86**		

*Notes.* Logistic regression for difference between respondents who took the only Time 1 survey (leavers) and who took the Time 4 survey (stayers). Leavers =1, Stayers =2. Gender: male =1, female =2. \*\*p < .01.

Table 2 Descriptive Statistics and Correlations

Variables	Mean	SD	α	1	2	3	4	5	6
1. Empowering Leadership (T1)	3.85	.71	.93						
2. Psychological Capital (T2)	4.76	.79	.92	.58**					
3. Trust in Leader (T2)	3.77	.95	.94	.60**	.44**				
4. Job Crafting (T3)	3.70	.61	.81	.41**	.47**	.36**			
5. Psychological Withdrawal (T4)	3.29	1.25	.82	32**	33**	31**	21**		
6. Physical Withdrawal (T4)	1.58	.77	.80	10	16**	20**	19**	.48**	
7. Positive Work Behavior (T4)	3.53	1.44	.84	.20**	.21**	.18**	.37**	12*	.04

Notes. N = 331. \*p < .05. \*p < .01.

Table 3
Summary of Model Fit Indices

Model Test	$\chi^2$	df	RMSEA	CFI	NNFI	IFI	$\Delta \chi^2 (df)$
Measurement Model	731.74**	231	.08	.95	.93	.95	
Hypothesized Model	828.02**	245	.08	.93	.93	.94	
Alternative Model 1: Adding 3 direct paths from empowering leadership to 3 work behaviors	799.20	242	.08	.94	.93	.94	28.82(3)**
Alternative Model 2: Adding a direct path from empowering leadership to job crafting	826.49	244	.08	.93	.93	.94	1.53(1)
Alternative Model 3: Adding 3 direct paths from psychological capital to 3 work behaviors	810.17	242	.08	.94	.93	.94	17.85(3)**
Alternative Model 4: Adding 3 direct paths from trust in leader to 3 work behaviors	803.91	242	.08	.94	.93	.94	24.11(3)**

*Note.*  $\chi^2$ -values for the structural models are significant at \*\*p < .01. Work behaviors include psychological withdrawal, physical withdrawal, and positive work behavior.

Table 4 Direct, Indirect, and Total Standardized Effects of Empowering Leadership on Work Behaviors in LISREL

Effect from	to		Direct Effects	Indirect Effects	Total Effect
Empowering Leadership	$\rightarrow$	Psychological Capital	.71**		.71**
	$\rightarrow$	Trust in Leader	.66**		.66**
	$\rightarrow$	Job Crafting		.53**	.53**
	$\rightarrow$	Psychological Withdrawal		23**	23**
	$\rightarrow$	Physical Withdrawal		13**	13**
	$\rightarrow$	Positive Work Behavior		.22**	.22**
Psychological Capital	$\rightarrow$	Job Crafting	.44**		.44**
<i>J C</i> 1	$\rightarrow$	Psychological Withdrawal		19 <sup>**</sup>	19 <sup>**</sup>
	$\rightarrow$	Physical Withdrawal		11**	11**
	$\rightarrow$	Positive Work Behavior		.18**	.18**
Trust in Leader	$\rightarrow$	Job Crafting	.33**		.33**
	$\rightarrow$	Psychological Withdrawal		14**	14**
	$\rightarrow$	Physical Withdrawal		08**	08**
	$\rightarrow$	Positive Work Behavior	•	.14**	.14**
Job Crafting	$\rightarrow$	Psychological Withdrawal	43**		43**
-	$\rightarrow$	Physical Withdrawal	25**		25**
	$\rightarrow$	Positive Work Behavior	.42**		.42**

*Notes.* If the indirect effect is equal to the total effect, only an indirect effect exists. p < .01.

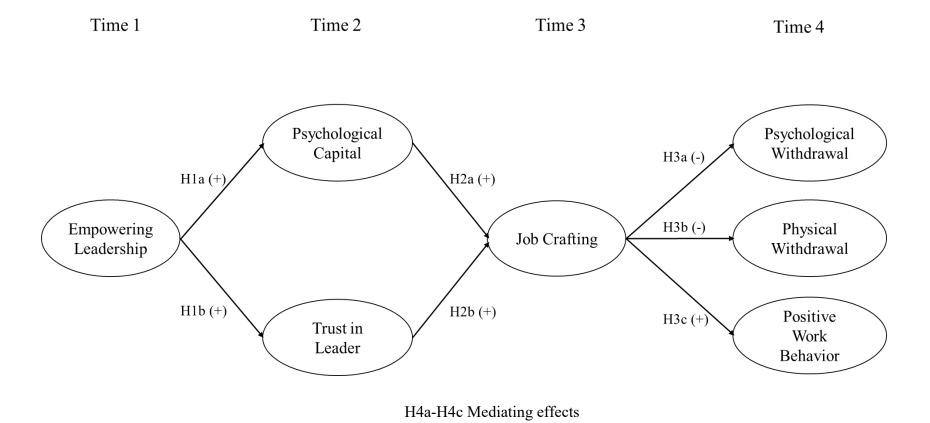


Figure 1. Hypothesized Model of Empowering Leadership, Psychological Resources, and Work Behaviors

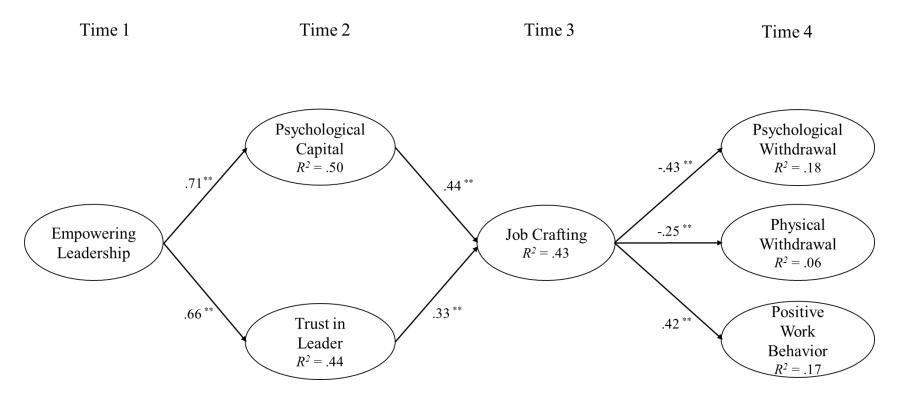


Figure 2. Structural Equation Model with Standardized Coefficients Note. All paths in structural model analysis are significant at  $^{**}p < .01$ .

Appendix A: Sample Characteristics

Variable	Group	Frequency (n)	Percentage (%)	Variable	Group	Frequency (n)	Percentage (%)
Gender	Male	180	54.4	Job Level	Line employees	134	40.9
	Female	151	45.6		Supervisors	135	41.2
Age	< 30 years	65	19.6		Managers	23	7.0
	30-39	125	37.8		Upper managers or executives	12	3.7
	40-49	72	21.8		Other (e.g., staff positions)	24	7.2
	50-59	50	15.1		Missing	3	_
	> 60 years	19	5.7		_		
Ethnicity	White	270	81.6	Mean hours v	nours worked per week $40.25$ (SD = $7.66$ )		
•	Black	19	5.7	Mean organiz	zational tenure 7.91 yea	rs (SD = 7.67)	)
	Mixed race	8	2.4		•		
	Other (e.g., Asian, Native-American etc.)	34	10.3				
Education	High school degree or equivalent	24	7.3				
	Some university but no degree	80	24.2				
	Bachelor's degree or above	227	68.5				
Marital	Single	123	37.2				
Status	Married	173	52.3				
	Other (e.g., divorced, cohabitation etc.)	35	10.5				
	Total	331	100		Total	331	100

#### Appendix B: Items for Measures

#### Empowering Leadership (Ahearne, Mathieu, & Rapp, 2005)

- 1. My supervisor helps me understand how my objectives and goals relate to that of the company.
- 2. My supervisor helps me understand the importance of my work to the overall effectiveness of the company.
- 3. My supervisor helps me understand how my job fits into the bigger picture.
- 4. My supervisor makes many decisions together with me.
- 5. My supervisor often consults me on strategic decisions.
- 6. My supervisor solicits my opinion on decisions that may affect me.
- 7. My supervisor believes that I can handle demanding tasks.
- 8. My supervisor believes in my ability to improve even when I make mistakes.
- 9. My supervisor expresses confidence in my ability to perform at a high level.
- 10. My supervisor allows me to make important decisions quickly to satisfy customer needs.
- 11. My supervisor allows me to do my job my way.
- 12. My supervisor makes it more efficient for me to do my job by keeping the rules and regulations simple.

#### Psychological Capital (Luthans, Youssef, & Avolio, 2007)

- 1. I feel confident in representing my work area in meetings with management.
- 2. I feel confident contributing to discussions about the organization's strategy.
- 3. I feel confident presenting information to a group of colleagues.
- 4. If I should find myself in a jam at work, I could think of many ways to get out of it.
- 5. Right now I see myself as being pretty successful at work.
- 6. I can think of many ways to reach my current work goals.
- 7. At this time, I am meeting the work goals that I have set for myself.
- 8. I can be "on my own," so to speak, at work if I have to.
- 9. I usually take stressful things at work in stride.
- 10. I can get through difficult times at work because I've experienced difficulty before.
- 11. I always look on the bright side of things regarding my job.
- 12. I'm optimistic about what will happen to me in the future as it pertains to work.

#### Trust in Leader (Robinson & Rousseau, 1994)

- 1. I am not sure I fully trust my employer (reverse score).
- 2. My employer is open and upfront with me.
- 3. I believe my employer has high integrity.
- 4. In general, I believe my employer's motives and intentions are good.
- 5. My employer is not always honest and truthful (reverse score).
- 6. I don't think my employer treats me fairly (reverse score).
- 7. I can expect my employer to treat me in a consistent and predictable fashion.

#### **Job Crafting** (Niessen, Weseler, & Kostova, 2016)

- 1. I concentrate on specific work tasks.
- 2. I undertake or seek for additional tasks.
- 3. I work more intensively on tasks I enjoy.
- 4. I usually limit the amount of time I spend with people I do not get along well with, and only contact them for things that are absolutely necessary.
- 5. I invest in the relationships with people whom I get along with the best.
- 6. I look for opportunities to work together with people whom I get along well with at work.
- 7. I try to look upon the tasks and responsibilities I have at work as having a deeper meaning than is readily apparent.
- 8. I find personal meaning in my tasks and responsibilities at work.
- 9. I view my tasks and responsibilities as being more than just part of my job.

#### Work Behaviors (Lehman & Simpson, 1992)

- 1. Thoughts of being absent
- 2. Chat with co-workers about non-work topics
- 3. Left work station for unnecessary reasons
- 4. Daydreaming on the job
- 5. Spent work time on personal matters
- 6. Put less effort into job than should have
- 7. Thoughts of leaving current job
- 8. Let others do your work
- 9. Left work early without permission
- 10. Taken longer lunch or rest break than allowed
- 11. Taken supplies or equipment without permission

- 12. Fallen asleep at work
- 13. Volunteered to work overtime
- 14. Did more work than required
- 15. Tried to think of ways to do job better16. Negotiated with supervisors to improve job
- 17. Made attempts to change work conditions