

Job Crafting Impact On Job Demands, Job Resources, And Employee Well-Being In Pondicherry Region

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ABSTRACT

This study investigated whether employees can influence their personal well-being by tailoring workplace demands and resources. We expected that employee job crafting would have an impact on work engagement, job satisfaction, and burnout through changes in job demands and job resources based on the Job Demands—Resources paradigm. Data was obtained in a manufacturing industry (N = 288). According to the findings of structural equation modeling, employees who crafted their job resources and study saw an increase in structural and social resources over the course of the study. According to the study, employee job crafting has a beneficial impact on well-being, and employees should thus be given opportunity to build their own occupations.

Keywords: burnout, job crafting, job demands resources, well-being,

Introduction about Job crafting

Work plays a significant role in almost everyone's life. Individuals work not only for material benefits (e.g., money), but also for fulfilling psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2000). Individuals can thus derive achievement, meaning, satisfaction, and identity out of work. Moreover, individuals are often not passive recipients of their

work environment (Seibert, Crant, & Kraimer, 1999). When they feel that their psychological needs are not being met in their jobs, individuals will be motivated to initiate changes in their job tasks and characteristics, which is referred to as job crafting.

Job crafting is a proactive behavior, in that individuals take an active role in their approach toward their work, initiate future-oriented actions, and create favorable conditions (Bindl and Parker, 2011; Crant, 2000; Grant and Ashford, 2008; Parker et al., 2010)

Wrzesniewski and Dutton (2001) propose that employees can change formerly constructed job roles by changing task and relational boundaries of the job in order to change work meaning and work identity. They specify three job crafting activities, namely task crafting, relational crafting and cognitive crafting.

Task crafting involves employees actively molding the tasks they have to fulfill at work by taking on more or fewer tasks, by altering the scope of the tasks, and by changing the means of task accomplishment. Relational crafting refers to the change of the quality and/or amount of interactions with others at work. Employees decide upon who they will interact with more or less intensively while doing the job. Cognitive crafting comprises reframing how employees perceive their job and altering their cognitive representation of the job (e.g. a 'hospital cleaner seeing her work as a means to help people rather than simply cleaning' (Berg, Dutton, & Wrzesniewski, 2008: 1)

Increases in Job Resources Predict Increases in Well-Being

Based on the JD-R model, Bakker et al 2011, which proposes that job resources are motivational, we expect that employees who increase their job resources will experience higher levels of work engagement. Work engagement is defined as an active, positive, work-related state characterized by vigor, dedication, and absorption. Vigor is characterized by high levels of energy, willingness to put effort into the job, and persistence in the face of difficulties. Dedication implies enthusiasm and to feel challenged by the job. Absorption is the quality of being fully concentrated and focused on the job. We also include job satisfaction because it is the most common operationalization of work-related well-being

According to Blanchflower & Oswald, 1999 A cross- national study that examined the determinants of job satisfaction supports our claim that job resources may fuel job satisfaction. The study showed that the most important determinants of job satisfaction were interesting work, good relationships with managers and colleagues, high salaries, and independent work.

Although work engagement and job satisfaction are both pre direct by job resources, they are different concepts by Alarcon & Lyons, 2011. Based on the circumflex model of affect (Posner, Russell, & Peterson, 2005), these constructs can be mapped onto two affective dimensions. The first dimension ranges from pleasure to displeasure, and the second dimension ranges from active to inactive. An engaged employee experiences high levels of pleasure and activation, whereas a satisfied employee is characterized by high levels of pleasure and inactivation (Bakker & Oerlemans, 2011). These dimensions allow researchers to conceptualize various aspects of employee well-being

Work engagement and job satisfaction may increase as a consequence of job crafting because employees can shape their job demands and resources to meet their own preferences and needs. The idea that changes in job characteristics affect employee well-being is not new.

For example, Hackman, Pearce, and Wolfe (1978) examined the effect of a job redesign intervention on the well-being of employees in a large work unit. The employees' jobs had been redesigned because of technological innovations. As a result, some jobs became more complex and challenging while others became simpler and less challenging or did not change. The results of the study showed that employees whose jobs were enriched reported higher scores 6 months later for the following job resources: skill variety, task identity, task significance, autonomy, and feedback. In addition, this group also reported higher scores on general satisfaction with the job, internal work motivation, and growth satisfaction. By contrast, the employees whose jobs were "de-enriched" scored lower on the same job resources six months later and showed decreased levels of job satisfaction, internal work motivation, and growth satisfaction. Minimal change was observed in the group whose job characteristics did not change substantially during the redesign period

More recent study shows that Schaufeli, Bakker, and Van Rhenen (2020) conducted a two-wave longitudinal study among managers showing that changes in job resources contributed to changes in employee well-being. They found that an increase in social support, autonomy, opportunities to learn, and performance feedback resulted in greater work engagement 1 year later. Therefore, when job resources increased, job satisfaction, work engagement, and intrinsic work motivation also tended to increase.

Finally, we include burnout in our model as a negative indicator of employee well-being. High levels of job resources protect employees from burnout (Bakker, et al 2011) because having access to larger pools of resources allows employees to fulfill job demands and protect themselves from strain. Burnout is operationalized by its two core dimensions: exhaustion and cynicism/disengagement Demerouti et al, 2012 Exhaustion is defined as work-related fatigue resulting from prolonged exposure to certain job demands. Cynical employees distance themselves from their work and experience negative attitudes toward the work object, work content, or their work in general (Demerouti et al., 2003).

We expect that employees who craft more job resources experience lower levels of burnout because they are better able to achieve their job tasks. A study by Schaufeli et al. (2009) showed that a decrease in job resources resulted in increased burnout one year later. This result suggests that high levels of job resources may play a role in preventing burnout

Hypothesis 1: Crafting structural job resources results in an increase in structural job resources, which predicts increased well-being.

Hypothesis 2: Crafting social job resources results in an increase in social job resources, which predicts increased well-being

Changes in Job Demands Predict Changes in Well-Being;

In previous sections, we focused on the beneficial effects of job resources on well-being. However, job demands also play a role in predicting employee well-being (see Karasek, 1985). Challenging job demands are responded to actively and in a solution-oriented manner (LePine et al., 2005). This appraisal process and the resulting behavioral response may elucidate the positive

relationship between challenging job demands and work engagement. Therefore, although challenging demands require hard work from the employee, he / she is motivated to work hard because the result is expected to be rewarding. However, this expectation does not prevent the employee from feeling tired as they exert the necessary extra effort.

Crawford, et al 2010 in the meta-analysis supports the argument that challenging demands are positively associated with both work engagement ($p = .21$, $p < .05$) and burnout ($p = .10$, $p < .05$). By contrast, Van den Broeck and colleagues in the year 2010 observed that job challenges were unrelated to exhaustion. They suggested that these challenges require extra effort and elicit fatigue but do not have an energy-depleting effect that causes employees to become completely exhausted. In addition, a meta-analysis by Podsakoff, et al 2007 showed that challenging job demands were positively related to job satisfaction.

Hypothesis 3: Crafting challenging job demands results in an increase in challenging demands, which predicts increased well-being.

Conversely, hindering job demands are considered stressful because they unnecessarily thwart personal growth and goal attainment and hinder optimal functioning (LePine et al., 2005). Previous studies have shown that hindering job demands may be related to burnout because employees must invest considerable resources to cope with these demands (Hakanen, Schaufeli, & Ahola, 2008; Schaufeli et al., 2009). In this study, we focus on the process by which employees proactively decrease their level of hindering demands. Doing so may allow employees to restore their energy levels and focus their efforts on their core work tasks, which may decrease their level of burnout and increase their levels of work engagement and job satisfaction. For example, when experiencing excessive cognitive demands, employees may improve their job characteristics by revising their work methods and schedules (Bunce & West, 1996).

Hypothesis 4: Crafting hindering job demands results in a decrease in hindering demands, which predicts increased well-being.

Method Procedure and Participants

The study was conducted in manufacturing plant in Pondicherry region. The plant produces automotive, pharmaceutical

industries. During the study period, the management made no formal changes to the employees' jobs. All employees ($N \approx 350$) were informed of the study via the intranet. Every employee then received an e-mail that described the aims of the study, emphasized confidentiality, and provided a personal login code. The e-mail also provided a link to the survey used to collect the data. The study have cross functional design; intervened At T1, the employees' job demands and resources and their levels of work engagement, job satisfaction, and burnout were measured. After completing the survey, all participants received anonymous standardized feedback (generated by a computer) containing their job demands and resources scores. The purpose of the feedback was to inform participants of their level of job demands and resources. The feedback was accompanied by short examples illustrating how employees could improve their level of job demands or resources. For example, one suggestion for increasing social job resources recommended that employees eat lunch with other employees or meet with other employees for social drinks after work. Importantly, it was not directly stated that the employee should act on these suggestions. This ensured that the job crafting we investigated remained personally initiated by the employee.

At T1, the survey was completed by 305 (85.1%) employees. Because of the dropouts, not all participants could be matched to earlier measurement waves. Therefore, the final sample comprised 288 participants who had completed of the survey (a response rate slightly higher than 23%). Consistent with the general distribution of gender within the organization, most of the participants were male (81.6%). The mean age of employees was 46.05 years ($SD = 8.72$), and the mean tenure was 18.32 years ($SD = 9.94$). On average, participants worked 38.75 hours a week ($SD = 6.76$). Of the respondents, 15% had a primary/secondary education, 40% had a vocational education, and 45% had a university or college degree.

Measurement Instruments Used at T1

Unless otherwise indicated, all job resource and job demand items were scored on a 5-point scale ranging from 1 (never) to 5 (always). The responses were coded such that high scores indicated high job resources and demands.

Structural job resources. To examine structural job resources, autonomy, variety, and opportunities for development were measured. Autonomy was assessed using a 3-item scale (Bakker, 2003) that included items such as, “Do you have flexibility in the execution of your job?” Reliability at T1 Variety was assessed using five items from the Dutch Questionnaire on the Experience and Evaluation of Work, which was developed by Van Veldhoven and Meijman (1994). Participants respond to questions such as, “Do you repeatedly do the same things in your work?” The reliability was .77 at T1. Opportunities for development was assessed using six items (Bakker et al., 2003). The following is a typical item from this scale: “My work offers me the opportunity to learn new things.” Reliability was .92 at T1

Social job resources; To examine social job resources, social support, feedback, and coaching were measured. Social support was measured using a 3-item scale (α T1 = .79;) that included items such as, “If necessary, can you ask your colleagues for help?” (Bakker et al., 2003). Feedback was also assessed using a 3-item scale (Bakker et al., 2003). A sample item from this scale reads, “I receive sufficient information about the results of my work.” Reliability was .85 at T1 Coaching was assessed using a 5-item Dutch adaptation (Le Blanc, 1994) of Graen and Uhl-Ben’s (1991) Leader-Member Exchange Scale (α T1 = .92). An example item from this scale includes, “My supervisor uses his or her influence to help me solve my problems at work

Challenging job demands; Workload was treated as a challenge demand in this study. It was measured using a Dutch version (Furda, 1995) of Karasek’s (1985) job content instrument. The scale includes three items (e.g., “Do you have to work quickly?”). Cronbach’s alpha was .94 at T1

Hindering job demands; the following two hindering job demands were measured at T1 and cognitive demands (four items; α T1 = .84;) and emotional demands (three items; α T1 = .62; Van Veldhoven & Meijman, 1994). An example of a cognitive demand item includes, “Do you have to be very precise in your work?” An example of an emotional demand item includes, “Does your work put you in emotional situations?” We addressed the low reliability of the emotional demands measure by examining whether deleting an item would result in a higher reliability score. The

correlation between the two remaining items was .44 at T1 and this 2-item scale was used in our analyses.

Work engagement was measured using the short 9-item version of the Dutch Utrecht Work Engagement Scale (UWES; Schaufeli, Bakker & Salanova, 2006). The UWES items reflect three underlying dimensions, which are measured by three items each: vigor (e.g., “At my work, I feel bursting with energy”), dedication (e.g., “My job inspires me”), and absorption (e.g., “I get carried away when I am working”). Participants responded on a 7-point scale ranging from 0 (never) to 6 (always). Cronbach’s alpha was .92, .95, and .83 for vigor, dedication, and absorption, respectively at T1

Job satisfaction was measured using three items that closely correspond with those in the Michigan Organizational Assessment Questionnaire (MOAQ; Cook, Hepworth, Wall, & Warr, 1981). The items included, “I am satisfied with my current work,” “Generally speaking, I’m really satisfied with my job,” and “Usually, I really enjoy my work.” The items were scored on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). Cronbach’s alpha was .94 at T1.

Burnout was measured using the Oldenburg Burnout Inventory (OLBI; Demerouti et al., 2003). The OLBI includes eight items to measure exhaustion (α T1 = .84; e.g., “After work, I usually feel worn out and weary”). The cynicism subscale also comprises eight items (α T1 = .87; e.g., “I increasingly speak negatively about my work.”). The items were scored on a 4-point scale ranging from 1 (totally disagree) to 4 (totally agree).

Data Analysis

To test our hypotheses, we used AMOS to perform structural equation modeling (SEM) with maximum likelihood estimation (Arbuckle, 2005). In addition to the chi-square statistic (χ^2), the analysis assessed the root mean square error of approximation (RMSEA), the comparative fit index (CFI), and the standardized root-mean-square residual (SRMR) (Kline, 2005). The conventional cut-off values of these fit indices were used to assess the model fit (i.e., CFI > .90, RMSEA < .06, and SRMR < .08; Marsh, Hau, & Wen, 2004).

The scale items were treated as indicators of the latent variable (job crafting). With regard to the latent change variables (J-Resources, J-demands, work engagement, job satisfaction, and burnout), we first calculated the mean score of each variable and then calculated the change scores for each variable. Williams, et al 1987 showed that residualized change scores have substantially higher reliability than simple difference scores because they are uncorrelated with the initial T1 score. The residual change score is the component of the score that could not be predicted from the baseline scores. Moreover, the residual change score is a method of singling out individuals who changed more or less than expected (Cronbach et al, 1970). The standardized residual was used as the indicator of these latent constructs.

Descriptive Statistics

Table 2 shows the correlations between the study variables, and Table 1 shows the correlations between each measurement wave. The demographic variables (age, work experience, and tenure) were correlated with job crafting and other study variables. We controlled for these demographics in our analyses.

Table -1 Correlations between Measurement Occasions (N = 288)

	1	2	3	4	5	6	7	8	9	10	11
1 Structure JR	.48**	.27**	.33**	-0.12							
2 Sour JR	.27**	.18**	.12*	-0.13	.68*						
3 Workload	0.09	0.1	.12*	0.03	.12*	-0.02					
4 Hind JD	0.11	.15*	.14*	0.05	0.1	-0.07	.62**				
5 Work Engagement	.49**	.31**	.39**	-0.03	.73**	.61**	0.23	.16*			
6 Job satisfaction	.39**	0.1	.23**	.17**	.67**	.57**	0.1	0.03	.69**	-	
7 Burnout	-0.35	-0.11	-0.22	-0.25	-0.7	-0.63	0.09	.13*	-0.65	-0.74	-

Note JR = Job resources; JD = Job demands; Srtuct =Structural;Hind = hindering
*p<.05 **p <.01

Table -2 Means Standard deviations, and Correlations among study variables (N =288)

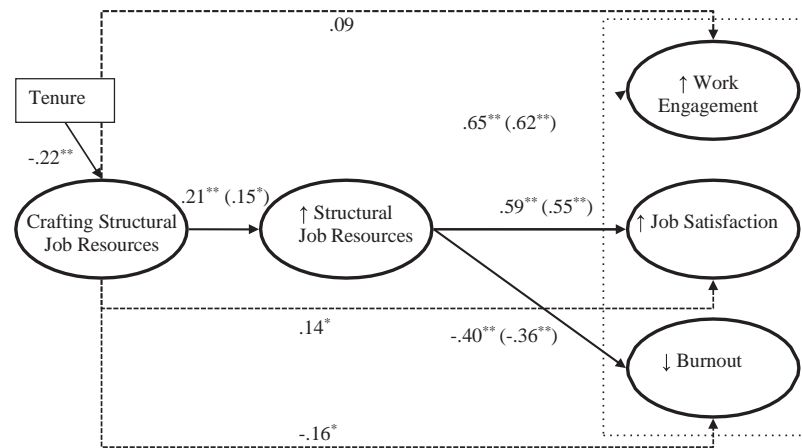
	M	SD	1	2	3	4	5	6	7	8	9	10
1 Age	46.05	8.72	-	-	-							
2 Experience	23.68	9.74	.94**	-	-							
3 Tenure	18.32	9.94	.75**	.76**	-	-	-	-	-	-	-	-
4 Hind JD	0.00	1.00	0.05	0.08	0.02	0.02	0.04	0.06	0.03	.14*	0.01	.17*
5 Work Engagement	0.00	1.00	-0.02	-0.03	-0.02	.14*	0.01	.12*	-0.04	.45**	.32**	0.03
6 Job satisfaction	0.00	1.00	0.01	-0.01	-0.02	.22**	0.09	0.09	0.02	.48**	.39**	-0.07
7 Burnout	0.00	1.00	-1.1	-0.10	-0.09	0.15*	0.01	-0.11	0.02	0.26**	.22**	0.13

Note JR = Job resources; JD = Job demands; Srtuct =Structural;Hind = hindering
 *p<.05 **p<.01

Hypotheses Testing

To test our hypotheses, we examined two models. We first examined the hypothesized model in which the change in job resources or demands mediated the relationship between job crafting and increased well-being (the fully mediated model). We also examined a partially mediated model that considered the direct effects of job crafting on the well-being variables. This allowed us to examine whether the change in job resources and demands fully or partially mediated the relationship between job crafting and increased well-being (Weston et al 2006)

In Hypothesis 1, we proposed that employees who crafted more structural job resources also showed an increase in these job resources and that this increase was associated with a higher level of well-being (i.e., work engagement, job satisfaction, and lower levels of burnout). The fully mediated model showed that all hypothesized paths were significant except the paths from age (.22, $p = .22$) and work experience (.23, $p = .20$) to increasing structural job resources. These paths were subsequently removed. The fit of the fully mediated model was adequate (see Figure 1). Crafting structural job resources resulted in an increase in structural job resources. This increase, in turn, was positively associated with increased well-being. The partially mediated model revealed that increasing structural job resources was significantly correlated with increased job satisfaction and decreased burnout. This result indicates that the increase in job resources partially mediated these specific relationships. Regarding work engagement, the effect of increasing structural job resources was fully mediated by the increase in these job resources.



The fit indices of the partially mediated model were almost identical to those of the fully mediated model (see Figure 1), and the change in the model fit was not significant at $p < .05$: $\chi^2(3) = 7.44$, $p = .06$. We therefore inspected the Akaike Information Criterion (AIC), an additional fit index that can be used to choose between competing models (Bozdogan, 1987). $AIC = 215.08$, $CI = [-.18, .02]$ Therefore, Hypothesis 1 was partially supported

In Hypothesis 2, we proposed that the increase in social job resources would mediate the relationship between crafting social job resources and increased well-being. The fully mediated model showed that the path between crafting social job resources and increased social job resources was significant. The increase in social job resources was, in turn, significantly related to increased well-being. Tenure was significantly associated with increasing social job resources. Because the AIC was lower for the hypothesized fully mediated model (fully mediated: 211.20; partially mediated: 215.48 and there were no direct effects of increasing social job resources on increased well-being, Hypothesis 2 appears to be supported.

Discussion and Conclusion

Although previous studies have shown that changes in job characteristics predict changes in employee well-being, none have focused on the ways employees change their work environment to benefit their own well-being. The central aim of the present study was to examine whether employees changed their job characteristics through job crafting and whether this change was positively related to enhanced well-being. We defined job crafting

as the changes that employees initiate to modify their levels of job demands and resources.

One practical implication of the study results is that employee job crafting should receive more attention at work because of its positive effect on well-being. Because job crafting occurs within organizations, managers should be aware of the effect that employees can have on their own work environment. It is the manager's task to manage job-crafting behaviors so that they contribute to personal and organizational goals. In addition, managers could inform their employees about job crafting strategies and stimulate employees to take initiative when they desire more challenging work or less hindering job demands.

In addition, our results do not suggest that employees should be held responsible for their work environment and well-being. Rather, they suggest that management interventions should focus more on the effects of job demands on employee well-being because employees seem to change their job demands less often than their job resources. Therefore, the interplay between managerial and employee interventions should be examined to create the most optimal work environment for employees.

The present study has extended our understanding of the effect of employee job crafting on job design and well-being. Employees who stated that they engaged in job crafting effectively increased their job resources over time, which was positively associated with increased well-being. These results obviously suggest that employees can optimize their own well-being when allowed to. Therefore, organizations should not only facilitate employee well-being by providing sufficient job resources and an optimal level of job demands, but they should also offer opportunities for employee job crafting.

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