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The Effect of Developmental Feedback on Employee Job Crafting: The Mediating Role of Learning Goal Orientation

Tingting Yao, Minghua Fu

Business School, Nanjing Normal University, Nanjing, China
Email: yiyao_smile@163.com

Abstract

Job crafting, as a proactive behavior, is becoming a hot topic in the field of organizational behavior. Based on the self-determination theory, this paper explored the influence mechanism of developmental feedback on employee job crafting (seeking resources, seeking challenges and reducing demands) and tested the mediating role of learning goal orientation in this relationship through a questionnaire survey of 305 employees. The results show that developmental feedback is positively related to expansion job crafting (seeking resources, seeking challenges), and is significantly negatively correlated with contraction job crafting (reducing demands); the learning goal orientation partially mediates the relationship between developmental feedback and expansion job crafting (seeking resources, seeking challenges), and fully mediates the relationship between developmental feedback and contraction job crafting (reducing demands). Finally, the implications and limitations of this empirical study are discussed.

Keywords

Developmental Feedback, Learning Goal Orientation, Job Crafting

1. Introduction

With the globalization of economy and the in-depth development of information technology, the speed of innovation and transformation of enterprises is accelerating, and the competition among enterprises is intensifying. Dynamic and complex work environment has become a trend, which also increases the initiative requirements for employees. Traditional work design is a top-down process in which the managers create jobs or change jobs, tasks, and roles for

employees. Employees rarely have the opportunity to participate in job design, which ignores the initiative of employees to change their work. With the improvement of culture, education and economic development, people's attitudes toward job are changing. More and more people begin to think about the meaning of work. Employees are not only satisfied with getting money through work to ensure the basic needs of life, but more importantly, they expect to combine personal abilities and interests with their jobs, and give full play to their skills and advantages to achieve self-value. In this context, a new research perspective has emerged in the field of organizational behavior—job crafting. Wrzesniewski and Dutton (2001) introduced the concept of job crafting to capture "the actions employees take to shape, mold, and redefine their jobs". Job crafting is a bottom-up job design process in which employees make the physical and cognitive changes in the task or relational boundaries of their work to match job with their own preference, skill, and ability better [1]. A large number of empirical studies indicated that job crafting contributes to individuals and organizations, such as improving organizational commitment, job performance, job satisfaction, work engagement, reducing turnover intention [2]-[7]. Therefore, it is of great theoretical and practical significance to understand the influencing factors of job crafting.

How to motivate employees to engage in more job crafting? At present, research on the influencing factors of job crafting focuses on employee personal attributes and job characteristics, such as initiative personality, individuals' work and motivational orientations, regulatory focus, self-efficacy, work pressure and autonomy, task independence [8] [9]. Supervisor has an important influence on employee attitudes and behaviors, but there are relatively few studies on the relationship between supervisor behaviors and employee job crafting. Wang *et al.* (2017) found that transformational leadership is an important antecedent of employee job crafting [10]. Tims & Bakker (2010) also suggested that more attention should be paid to the influence of supervisors in the job crafting in the future [11]. Supervisors should stimulate employees' intrinsic motivation of job crafting, and provide feedback on employees' work behavior and performances, and make employees' goals consistent with organizational goals, so as to improve employee job performance and the perception of work meaning and value. Developmental feedback, a type of feedback designed to help employees learn and grow, is a positive leadership behavior. Whether it can stimulate subordinates' job crafting behavior is seldom studied. Therefore, this paper explores the impact of developmental feedback on job remodeling behavior firstly.

According to the theory of leadership effectiveness, the impact of leadership on employees is not direct, but indirect through influencing employees' motivation or cognition (Wang & Howel, 2010) [12]. Whether the motivation can be transformed into job crafting behaviors depends on the employee's motivational orientation. The employees with strong internal motivation are more likely to engage in extensive job crafting activities to fulfill the needs of control and competence (Wrzesniewski & Dutton, 2001) [1]. Learning goal-oriented individuals

strive to acquire new knowledge, skills, pay attention to self-development, and have stronger intrinsic motivations (Vandewalle, 2001) [13]. Therefore, can developmental feedback stimulate job crafting by improving employees' learning goal orientation? In order to answer the above questions, this paper, based on self-determination theory and taking employees as objects, explores the relationship between developmental feedback and job crafting and takes learning goal orientation as the mediator to reveal the black box of the relationship between developmental feedback and job crafting. Through empirical tests, this study will help to further examine the influencing mechanism of employee job crafting behavior, and provide theoretical reference for organizational intervention management.

2. Theory and Hypotheses

2.1. Job Crafting

Jobcrafting was first proposed by Wrzesniewski & Dutton (2001). It refers to the self-initiated and change-oriented behavior of employees with the goal to ensure a better fit between the job and individual interests, motivations, and passions. Employees crafting their jobs in three ways: task crafting, relationship crafting, and cognitive crafting. Task crafting means that employees change the number, scope and type of tasks, including increasing or reducing the number of tasks and changing the way they work. Relationship crafting means that employees change the way they interact with others at work. Cognitive crafting refers to employees changing their perception of the job in a way that enhances the meaning of work. Through job crafting, employees will enhance the meaning of work and have a positive work identity [1].

Later, some scholars redefine job crafting based on the Job Demands-Resources (JD-R) theory. Job demands refer to those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs, including workload, role conflicts, emotional demands, etc. Job resources refer to those physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals, reduce job demands and the associated physiological and psychological costs, or stimulate personal growth, learning, and development, such as social support, autonomy, job compensation, performance feedback (Demerouti *et al.*, 2001) [14]. According to this theory, Demerouti (2014) defines job crafting as "changes that employees initiate in the level of job demands and job resources to make their own job more meaningful, engaging, and satisfying" [15], including seeking resources (e.g., contacting other people at work to get work-related information), seeking challenges (e.g., asking for more tasks or responsibilities) and reducing demands (e.g., diminishing emotional, cognitive, or physical job demands) [7]. Seeking resources and seeking challenges refer to behaviors that expand the job (*i.e.*, expansion job crafting), whereas reducing demands refers to behaviors that contract the job

(*i.e.*, contraction job crafting) (Wang, Demerouti, & Bakker, 2017) [16]. Studies have shown that expansion job crafting (seeking resources and seeking challenges) is positively related to work engagement and job satisfaction, while contraction job crafting (reducing demands) is positively related to turnover intentions, anti-production behavior, and negatively related to task performance (Petrou *et al.*, 2015; Demerouti *et al.*, 2015) [17] [18].

Although the above views discuss job crafting from different perspectives, they are closely related. Seeking challenges and reducing demands can be seen as changing the boundaries of tasks, and seeking resources, for example, social support, is similar to relational crafting. The former view by Wrzesniewski & Dutton (2001) puts more emphasis on the individual characteristics in terms of the motivation and outcomes of job crafting, which is lack of discussion on the interaction between job crafting and external environment. The latter makes up for the gap, emphasizing the influence of external environmental factors (e.g., job characteristics) on job crafting. The JD-R perspective on job crafting provides an effective measurement method and has been widely used in empirical research (Tims *et al.*, 2012) [19]. Therefore, this paper adopts the concept of job crafting from the perspective of the JD-R theory.

2.2. Developmental Feedback and Job Crafting

Job crafting is a proactive behavior that employees make changes to their jobs initially, but organizations can stimulate the autonomic motivation of employee job crafting through intervention [20]. Feedback is a common way to intervene in employee behavior and job performance in organizations. The feedback model proposed by Ilgen *et al.* in 1979 reflects the feedback process more comprehensively, which involves three key elements: feedback source, feedback content, and feedback recipient. The feedback sources include organizations, supervisors, colleagues, subordinates and themselves. The feedback from the supervisor is the most valuable [21]. Traditional supervisor feedback is based on the employee's performance and work goals. Longenecker *et al.* (1996) found that formal performance feedback does not play a role in promoting work motivation and improving job performance, and he suggested that supervisor feedback should focus on the personal development of employees [22]. That indicates that the supervisor should provide more developmental information to the employees instead of traditional performance feedback. Developmental feedback refers to the extent to which supervisors provide their employees with helpful or valuable information that enables the employees to learn, develop, and make improvements on the job. It has three characteristics: the feedback source is supervisor; the feedback content is about employee's development; the feedback type is informative.

According to the self-determination theory (SDT) [23], developmental feedback, as an organizational situational factor, can satisfy the three basic psychological needs of employee: autonomy, competence, and relatedness, and boost

the intrinsic motivation (Zhou, 2003) [24], and stimulate employee job crafting behaviors. The developmental feedback is information-based feedback that aims of providing employees with information that help to improve performance. It does not force employees to achieve specific work goals in the future so that it can meet employees' need for autonomy. Job autonomy is also a crucial antecedent variable in job crafting. Developmental feedback focuses on employees' future development, aiming to develop the potential of employees and improve their knowledge and ability to meet their need for competence. In addition, developmental feedback can create a relaxed and free atmosphere for employees, improve employees' trust in supervisors, and promote leader-member exchange (LMX) to meet employees' need for relatedness. Therefore, developmental feedback can improve employees' intrinsic motivation. Employees with strong internal motivation are more likely to craft their jobs (Wrzesniewski & Dutton, 2001). Besides, employees need to pay more time and effort in the process of job crafting, which may lead to higher pressure, workload and burnout [25]. If it fails, employees would be frustrated (Berg, Grant, and Johnson, 2010) [26]. Developmental feedback can lower the risk and improve levels of psychological safety. Supervisors convey their expectations for employees through feedback and enhance employee organizational identity [24], making employees aware of what behaviors are allowed and which are not, thereby increasing employees job crafting behavior consistent with organizational goals. The specific explanation is as follows:

First of all, supervisors are familiar with employees' progress of work, and they can provide employees with valuable information. Supervisors have a lot of precious resources, such as work-related knowledge and experience, which play a significant role in employees' career development. In communication with employees, supervisors may share these information resources with employees and encourage employees to look for development opportunities and increase job resources. In addition, developmental feedback enables the employees to feel the care and support of leaders and enhance employees' the intention of seeking feedback. Secondly, developmental feedback is future-oriented, which provides employees with beneficial feedback on learning and development. So employees will feel that supervisors are concerned about their growth and development, thus stimulating individual interest in the work itself and actively seeking challenges. Challenging behavior means risks and uncertainties, but employees feel support and encouragement with developmental feedback and face up to challenges. Reducing demands, for example, reducing workload, is essentially a withdrawal behavior, which is negatively related to contextual performance [27], and positively related to turnover intention and emotional exhaustion [28]. Reducing demands is not conducive to the future development of organizations and employees. Therefore, employees will reduce such behavior under the developmental feedback. Based on the above, we propose:

Hypothesis 1*a*: *Developmental feedback is positively related to employees'*

seeking resources;

Hypothesis 1*b*: *Developmental feedback is positively related to employees' seeking challenges*;

Hypothesis 1*c*: *Developmental feedback is negatively related to employees' reducing demands.*

2.3. Developmental Feedback and Learning Goal Orientation

Goal orientation, derived from Achievement Motivation Theory, refers to individual preference when pursuing specific goals [29]. Early scholars considered goal orientation as a personality trait variable. In recent years, some studies have found that goal orientation is also a state variable because of influenced by external environment [30]. Dweck (1988) divided the goal orientation into two dimensions: learning goal orientation and performance goal orientation. Individuals with learning goal orientation believe that their abilities can be improved through learning, and tend to improve skills and acquire knowledge; individuals with performance goal orientation believe that abilities are inherent, like showing themselves, expecting to get positive evaluations or avoid negative evaluations by comparing with others [31]. This paper argues that developmental feedback can motivate the employee's learning goal orientation. Developmental feedback provides valuable information to improve employees' abilities, skills. It is considered that the employees' ability can be improved through efforts but not invariable. Therefore, supervisors will provide feedback that contributes to employees' learning and development. According to the social information processing theory, the views and behaviors of supervisors will influence the behaviors of subordinates. Developmental feedback makes subordinates believe that they can improve their abilities and competitiveness by learning, thus promoting the learning goal orientation. In addition, the positive and useful feedback provided by the supervisor will further reinforce the learning goal orientation. Based on the above, we propose:

Hypothesis 2: *Developmental feedback is positively related to the employee's learning goal orientation.*

2.4. Learning Goal Orientation as a Mediator

Employees with high learning orientation pay more attention to personal growth and will accumulate available resources for future development, such as upgrading professional skills and abilities, expanding knowledge, and seeking feedback and support from supervisors and colleagues [32]. In addition, they also focus on the intrinsic value of a job, prefer challenging and complex work, and hope to improve themselves in work. Even if they encounter difficulties, they will not give up but will pay more effort. As a result, employees with high learning orientation are more likely to seek challenging jobs rather than to withdraw, for example, reducing workload. Developmental feedback concerned about the growth and development of employees can meet the basic psychological needs of

employees, which will stimulate intrinsic motivation (Zhou, 2003). This will enhance employees' interest in the task itself and learning goal orientation. So that employees will focus on personal development and self-realization and engage in expansion job crafting (seeking resources, seeking challenges.) rather than contraction job crafting (reducing demands) to improve themselves. Based on the above, we propose:

Hypothesis 3: *Learning goal orientation mediates the relationship between developmental feedback and job crafting* (*seeking resources, seeking challenges, and reducing demands*).

The theoretical model of this paper is shown in Figure 1. We believe that high supervisor developmental feedback will improve employees' learning goal orientation, and employees with high learning goal orientation will have high intrinsic work motivation, so employees will engage in more expansion job crafting behavior (seeking resources and seeking challenges), and reduce contraction job crafting behavior (reducing demands). Based on self-determination theory, this paper will explore the relationship between developmental feedback and job crafting, taking learning goal orientation as the mediator.

3. Research Methods

3.1. Sample and Procedure

The participants in the study were 350 randomly selected employees from enterprises in Anhui, Jiangsu, Zhejiang, and Hubei provinces of China. We collected data by online questionnaire survey and field questionnaire survey. In all surveys, a cover letter attached to the questionnaire indicated that the survey was only for academic research purposes, and the strict confidentiality responses were guaranteed. In the end, 335 employees completed the questionnaires. After excluding the incomplete ones, there were 305 valid questionnaires，resulting in an overall response rate of 87.14%. There were 159 women (52.13%) and 146 men (47.87%) in the sample. The age distribution of the sample population was mainly young people under the age of 30, accounting for 79.35% of the total. About 73.77% of employees had completed a university degree, and about 14.43% of employees even had completed a master degree. Most employees had worked 1 - 3 years, accounting for 36.72%, followed by less than one year, accounting for 34.75%. Demographic information for valid samples is shown in Table 1.
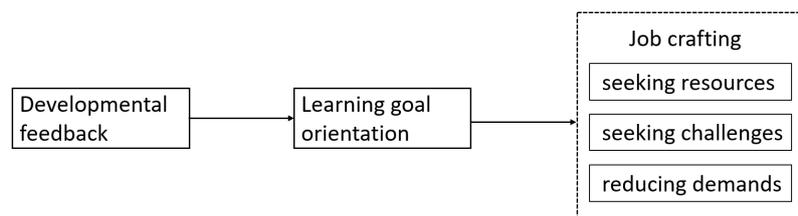
Figure 1. Theoretical model.

Table 1. Demographic characteristics of the analytic sample.

	Variable	Frequency	Percentage (%)
Gender	Male	146	47.87
	Female	159	52.13
	<25	138	45.25
Age	25 - 30	104	34.10
	31 - 40	56	18.36
	>40	7	2
	high school and below	7	2.30
Education	associate degree	29	9.51
	Bachelor's degree	225	73.77
	Master's degree and above	44	14.43
	<1	106	34.75
	1 - 3	112	36.72
Tenure	4 - 6	49	16.07
	7 - 10	17	5.57
	>10	21	6.89

3.2. Measures

The measurement scales this study were recognized mature scales by most researchers. Except for the control variables (gender age, education, and tenure), measures were operationalized with three items and answers were rated on a 7-point Likert scale (l = strongly disagree, 7 = strongly agree). All items were translated the existing scales into Chinese from English, asked are searcher who is proficient in English and Chinese to translate them back to English as an accuracy check.

Developmental feedback. We measured developmental feedback with three items from a scale developed by Zhou (2003). A sample item was "My supervisor gave me feedback mainly to help me learn and improve." Cronbach's α was 0.822.

Learning goal orientation. We measured Learning goal orientation with five items from a scale developed by Vandewalle (1997). A sample item was "I often read some work-related materials to improve my ability." Cronbach's α was 0.853.

Job crafting. We measured Job crafting with 11 items from a scale developed by Petrou *et al.* (2016), which measured the three types of job crafting using three subscales: seeking resources, seeking challenges, and reducing demands. Seeking resources was measured with four items. A sample item was "I ask others for feedback on my job performance," Cronbach's α was 0.892. Seeking challenges was measured with three items. A sample item was "I ask for more tasks if I finish my work." Cronbach's α was 0.867. Reducing demands was measured

with four items. A sample item was "I try to simplify the complexity of my tasks at work." Cronbach's α was 0.827.

Control variables. We controlled for gender, age, education, and tenure in testing our hypotheses.

3.3. Research Analysis Method

In this study, SPSS22.0 and AMOS23.0 were used for statistical analysis. First of all, we verified the reliability and effectiveness of the scale by confirmatory factor analysis. Secondly, we tested the effect of common method bias on our results by common method bias test. Finally, we employed descriptive statistical analysis and regression analysis method to prove the main effect and the mediation effect.

4. Results

4.1. Confirmatory Factor Analysis

We conducted confirmatory factor analyses to test the discriminant validity of scales of developmental feedback, learning goal orientation, seeking resources, seeking challenges, and reducing demands. The results are shown in Table 2. The five-factor model showed reasonable fit indices, $\chi^2(142) = 2.081$, comparative fit index (CFI) = 0.951, root mean square error of approximation (RMSEA) = 0.060. We compared this model to other alternative models in which the factor correlation between constructs (e.g., seeking resources, seeking challenges, and reducing demands) was fixed to unity. Our hypothesized model showed a superior fit to the data than any alternative model, indicating that the constructs are empirically distinct.

4.2. Common Method Bias Test

Since our data in this study came from a single source, so we conducted Harman's one-factor test to detect the presence of common method variance. The results of the unrotated factor analysis indicated that we had five factors the same number as included in our model. The first factor accounted for 36.895%, and all factors accounted for 72.124% of the variance, indicating that the common

Table 2. Confirmatory factor analysis results.

Model	Factor	χ^2/df	CFI	TLI	GFI	RMSEA
Five-factor model	DF, LGO, SR, SC, RD	2.081	0.951	0.941	0.906	0.060
Four-factor model	DF, LGO, SR + SC, RD	3.805	0.869	0.847	0.820	0.096
Three-factor model	DF, LGO, SR + SC + RD	6.609	0.733	0.694	0.703	0.136
Two-factor model	DF + SR + SC + RD, LGO	8.607	0.633	0.585	0.650	0.158
One-factor model	DF + LGO + SR + SC + RD	9.817	0.572	0.519	0.618	0.170

Note. DF = Developmental Feedback, LGO = Learning goal orientation, SR = Seeking resources, SC = Seeking challenges, RD = Reducing demands.

method variance of this study is not serious. Because the Harman single factor test method is relatively simple, the reliability of the conclusion is questioned. So we adopted the recommendation by Podsako *et al.* (2003) to load all items on one general factor which represents the common factor [33]. In the result, the one-factor model showed a worse model fit ($\chi^2(152) = 2.095$, CFI = 0.951, GFI = 0.906, RESEA = 0.170) compared with the five-factor model ($\chi^2(142) = 2.081$, CFI = 0.951, RMSEA = 0.060). According to the above analysis, we believe that our results are less affected by common method bias.

4.3. Descriptive Statistics and Correlations

The means, standard deviations and correlations of the variables are presented in Table 3. Developmental feedback had a significant positive correlation with learning goal orientation ($r = 0.193$, $p < 0.01$), seeking resources ($r = 0.219$, $p < 0.01$), seeking challenges ($r = 0.310$, $p < 0.01$), and a significant positive correlation with reduction demands ($r = -0.13$, $p < 0.05$). As expected, learning goal orientation was significantly and positively correlated with seeking resources ($r = 0.628$, $p < 0.01$), seeking challenges ($r = 0.464$, $p < 0.01$), and was significantly and negatively correlated with reducing demands ($r = -0.349$, $p < 0.01$). These preliminarily supported our hypotheses.

4.4. Hypotheses Testing

We tested our hypotheses using the SPSS22.0 software package. The analysis results are presented in Table 4. Our first hypothesis proposes that developmental feedback is positively related to seeking resources (H1a), seeking challenging (H1b) and negatively related to reducing demands (H1c). As can be seen, developmental feedback is significantly and positively related to seeking resources (M3, $\beta = 0.182$, $p < 0.001$), seeking challenges (M5, $\beta = 0.270$, $p < 0.001$), and negatively related to reducing demands (M7, $\beta = -0.089$, $p < 0.01$), however. Therefore, hypothesis 1a, 1b, 1c were all supported.

Table 3. Means, standard deviations and correlations among the study variables.

Variable	M	SD	1	2	3	4	5	6	7	8
1) Gender	1.521	0.500								
2) Age	1.784	0.846	−0.090							
3) Education	3.003	0.576	−0.029	−0.073						
4) Tenure	2.131	1.157	−0.147*	0.678**	0.019					
5) Developmental feedback	5.066	1.158	−0.052	−0.101	0.067	−0.085				
6) Learning goal orientation	5.315	0.892	−0.112	0.211**	−0.008	0.126*	0.193**			
7) Seeking resources	5.748	0.864	−0.040	0.246**	0.015	0.150**	0.219**	0.628**		
8) Seeking challenges	5.338	0.957	−0.133*	0.178**	0.028	0.170**	0.310**	0.464**	0.478**	
9) Reducing demands	4.514	0.673	0.052	−0.077	0.087	−0.074	−0.139*	−0.349**	−0.416**	−0.333**

Note: N = 305, *$p < 0.05$, **$p < 0.01$.

Table 4. Results of regression analyses.

Variables	LGO		SR		SC		RD	
	M1	M2	M3	M4	M5	M6	M7	M8
Gender	−0.175	−0.151	−0.008	0.077	−0.172	−0.109	0.047	0.009
Age	0.248*	0.263**	0.295***	0.148*	0.166*	0.057	−0.037	0.028
Education	0.011	−0.009	0.030	0.035	0.021	0.024	0.112	0.109
Tenure	−0.037	−0.029	−0.020	−0.003	0.070	0.082	−0.030	−0.038
DF		0.163***	0.182***	0.091**	0.270***	0.203***	−0.089**	−0.048
LGO				0.561***		0.416***		−0.250***
R2	0.504	0.098	0.121	0.424	0.154	0.290	0.039	0.138
ΔR2	0.054	0.044	0.058	0.303	0.105	0.136	0.023	0.099
F	4.316*	6.501***	8.225***	36.499***	10.916***	20.273***	2.413**	7.937***

Note: ***$p < 0.001$.

Hypothesis 2 predicted that developmental feedback would be positively related to learning goal orientation. As can be seen, It can be seen from M2 that the developmental feedback is significantly and positively correlated with the learning goal orientation ($\beta = 0.163$, $p < 0.001$). Therefore, H2 is supported by the data.

Finally, hypothesis 3 predicted that developmental feedback would be indirectly related to job crafting (seeking resources, seeking challenges, reducing demands) through learning goal orientation. When the developmental feedback and learning goal orientation were entered in the regression model at the same time (see M4 in Table 4), the beta coefficient for developmental feedback was statistically significant and reduced from $\beta = 0.182$ ($p < 0.001$) to $\beta = 0.091$ ($p < 0.01$). Thus, learning goal orientation partially mediated the relationship between developmental feedback and seeking resources. Similarly, learning goal orientation partially mediated the relationship between developmental feedback and seeking challenges ($\beta = 0.203$, $p < 0.001$). As shown M9 in Table 4 that after the learning goal orientation was entered in the regression model, the beta coefficient for developmental feedback was not significant ($\beta = 0.048$, $p > 0.05$). So, the learning goal orientation fully mediated the relationship between developmental feedback and reducing demands. Taken together, these findings fully support Hypothesis 3.

To sum up, through confirmatory factor analyses and hierarchical multiple regression, we found that supervisor providing developmental feedback can stimulate employees to increase expansion job crafting behaviors (seeking resources, seeking challenges) and reduce contraction job crafting behaviors (reducing demands) through enhancing the employees' learning goal orientation.

5. Discussion

The purpose of this study was to explore the relationship between developmental

feedback and job crafting (seeking resources, seeking challenges, reducing demands). According to previous research, seeking resources and seeking challenges were promotion-oriented, and reducing demands were prevention-oriented. Different job crafting strategies resulted in different outcomes. Therefore, it is necessary to explore the relationship between developmental feedback and different job crafting behaviors. We also found that learning goal orientation played a mediating mechanism role in the relationship. As we expected, our hypotheses were supported by empirical results.

5.1. Theoretical Implications

First, our results enrich the job crafting of antecedents. How to stimulate employees job crafting? Previous researches focused on individual proactive personality, self-efficacy and job characteristics through empirical analysis. Schoberova (2015) studied organization job crafting intervention. He suggested that organizational managers are important participants in job crafting intervention and managers should provide timely feedback on the employees' work [34]. Van Wingerden (2017) found that job crafting intervention can stimulate employees' intrinsic motivation of job crafting via work feedback [35]. This paper expanded the research on the influencing factors of job crafting from the perspective of managers and found that developmental feedback can predict expansion job crafting and negatively predict contraction job crafting to the contrary. This responded to the calling of Tims *et al.* (2010) that the role of supervisors in employees job crafting should be paid more attention.

Secondly, the previous studies regarded job crafting as a whole concept and discussed the positive or negative relationship with other variables. For example, on the whole, job crafting had positive correlation with work engagement [3] [36] [37]. However, some found that different job crafting strategies had different relationships with work engagement. Demerouti *et al.* (2015) found that seeking resources and seeking challenges were positively related to work engagement, and reducing demands was negatively correlated with work engagement. This paper confirmed that point again. Developmental feedback can stimulate employees' intrinsic motivation, then increase the behaviors of seeking resources and seeking challenges. While reducing demands is a withdrawal behavior, essentially. When supervisors care about subordinate's development and give them feedback on their work, they will reduce this behavior. To a certain extent, the results deepened the understanding of job crafting.

Finally, this paper, based on the perspective of self-determination theory, found a "key" of learning goal orientation to explain the internal path of developmental feedback affecting job crafting (seeking resources, seeking challenges, reducing demands). The study found that developmental feedback can motivate employees' learning goal orientation, thus transforming external motivation into intrinsic motivation. Employees with high intrinsic motivations tend to make changes to their work, such as seeking resources and challenges, as a result to have a sense of accomplishment through work. This paper provides a new theo-

retical perspective for explaining the influencing factors of employee job crafting.

5.2. Practical Implications

Our study suggests that supervisors should consider providing more developmental feedback to motivate employees to craft their jobs. Although job crafting is a proactive behavior, employees need abilities and opportunities, and more importantly, support from supervisors. Supervisors can give some constructive suggestions by feedback, let the employees feel that their supervisors concern about their future development. Previous studies have found that engaging in contraction job crafting such as reducing demands may not be positively related to job performance or may even bring negative outcomes to the organization (Demerouti, Bakker, Halbesleben, 2015). However, when supervisors provide developmental feedback, the employee will increase the expansion job crafting (seeking resources, seeking challenges) and reduce contraction job crafting (reducing demands) driven by the intrinsic motivation, so as to bring positive outcomes that individual goals are consistent with organizational goals.

The findings of the mediation effect suggest that an effective way to increase job crafting is by improving employee learning goal orientation. Therefore, organizations may consider increasing employees learning goal orientation in order to promote their job crafting. Developing supervisor developmental feedback is one way to do this. In addition, some other organizational practices (e.g., organizational support) may also have an impact on employee learning goals. Meanwhile, organizations should collect the candidates with higher learning goal orientation and foster employee's learning goal orientation when recruiting, training and other human resource management activities.

5.3. Limitations and Future Directions

This study has some limitations that should be acknowledged. First, because of using a cross-sectional design and our variables data came from the same source, our findings can't provide strong evidence for the causality among variables. In the future, longitudinal research can be adapted to address this issue. Second, because of the self-rating of all variables by employees, although the statistical results showed that there was no obvious common method bias, it cannot be completely excluded. Future studies can try to rate job crafting by colleagues and supervisors. Third, the relationship between developmental feedback and job crafting may also be affected by situational and individual factors. So the boundary conditions should also be considered in future research，such as proactive personality, and job autonomy.

6. Conclusion

This paper examined how developmental feedback stimulates employee job crafting via increasing employee learning goal orientation. The results showed

that developmental feedback had a direct effect on job crafting (seeking resources, seeking challenges); learning goal orientation partially mediates the relationship between developmental feedback and expansion job crafting (seeking resources, seeking challenges), and fully mediates the relationship between developmental feedback and contraction job crafting (reducing demands). These findings suggest that developmental feedback encourages employees to enrich their job characteristics by increasing job resources and job challenges rather than reducing job demands. Despite existing several limitations, this article makes some important contributions. For example, we found that supervisor developmental feedback is an important antecedent of employees learning goal orientation and job crafting. These findings provide theoretical reference for organizational intervention management. We hope that this topic will be further explored in the future, for example, collecting data from supervisors and colleagues by longitudinal research design to explore the relationship between developmental feedback and job crafting, as well as other mediators and boundary conditions.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

[1] Wrzesniewski, A. and Dutton, J.E. (2001) Crafting a Job: Revisioning Employees as Active Crafters of Their Work. *Academy of Management Review*, **26**, 179-201. https://doi.org/10.5465/amr.2001.4378011

[2] Leana, C., Appelbaum, E. and Shevchuk, I. (2009) Work Process and Quality of Care in Early Childhood Education: The Role of Job Crafting. *Academy of Management Journal*, **52**, 1169-1192. https://doi.org/10.5465/amj.2009.47084651

[3] Bakker, A.B., Tims, M. and Derks, D. (2012) Proactive Personality and Job Performance: The Role of Job Crafting and Work Engagement. *Human Relations*, **65**, 1359-1378. https://doi.org/10.1177/0018726712453471

[4] Tims, M., Bakker, A.B. and Derks, D. (2013) The Impact of Job Crafting on Job Demands, Job Resources, and Well-Being. *Journal of Occupational Health Psychology*, **18**, 230-240. https://doi.org/10.1037/a0032141

[5] Tims, M., Bakker, A.B. and Derks, D. (2015) Job Crafting and Job Performance: A Longitudinal Study. *European Journal of Work and Organizational Psychology*, **24**, 914-928. https://doi.org/10.1080/1359432X.2014.969245

[6] Demerouti, E., Bakker, A.B. and Gevers, J.M. (2015) Job Crafting and Extra-Role Behavior: The Role of Work Engagement and Flourishing. *Journal of Vocational Behavior*, **91**, 87-96. https://doi.org/10.1016/j.jvb.2015.09.001

[7] Petrou, P., Demerouti, E., Peeters, M.C., Schaufeli, W.B. and Hetland, J. (2012) Crafting a Job on a Daily Basis: Contextual Correlates and the Link to Work Engagement. *Journal of Organizational Behavior*, **33**, 1120-1141. https://doi.org/10.1002/job.1783

[8] Brenninkmeijer, V. and Hekkert-Koning, M. (2015) To Craft or Not to Craft: The Relationships between Regulatory Focus, Job Crafting and Work Outcomes. *Career*

Development International, **20**, 147-162. https://doi.org/10.1108/CDI-12-2014-0162

[9] Tims, M., Bakker, A.B. and Derks, D. (2014) Daily Job Crafting and the Self-Efficacy-Performance Relationship. *Journal of Managerial Psychology*, **29**, 490-507. https://doi.org/10.1108/JMP-05-2012-0148

[10] Wang, H.J., Demerouti, E. and Le Blanc, P. (2017) Transformational Leadership, Adaptability, and Job Crafting: The Moderating Role of Organizational Identification. *Journal of Vocational Behavior*, **100**, 185-195. https://doi.org/10.1016/j.jvb.2017.03.009

[11] Tims, M. and Bakker, A.B. (2010) Job Crafting: Towards a New Model of Individual Job Redesign. *SA Journal of Industrial Psychology*, **36**, 1-9. https://doi.org/10.4102/sajip.v36i2.841

[12] Wang, X.H. and Howell, J.M. (2010) Exploring the Dual-Level Effects of Transformational Leadership on Followers. *Journal of Applied Psychology*, **95**, 1134-1144. https://doi.org/10.1037/a0020754

[13] Vandewalle, D., Cron, W.L. and Slocum, J.W. (2001) The Role of Goal Orientation Following Performance Feedback. *Journal of Applied Psychology*, **86**, 629-640. https://doi.org/10.1037/0021-9010.86.4.629

[14] Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2001) The Job Demands-Resources Model of Burnout. *Journal of Applied Psychology*, **86**, 499-512. https://doi.org/10.1037/0021-9010.86.3.499

[15] Demerouti, E. (2014) Design Your Own Job through Job Crafting. *European Psychologist*, **19**, 237-247. https://doi.org/10.1027/1016-9040/a000188

[16] Wang, H., Demerouti, E. and Bakker, A.B. (2016) A Review of Job Crafting Research: The Role of Leader Behaviors in Cultivating Successful Job Crafters. In: Parker, S.K. and Bindl, U.K., Eds., *Proactivity at Work: Making Things Happen in Organizations*, Taylor and Francis, Abingdon-on-Thames, 77-104.

[17] Demerouti, E., Bakker, A.B. and Halbesleben, J.R.B. (2015) Productive and Counterproductive Job Crafting: A Daily Diary Study. *Journal of Occupational Health Psychology*, **20**, 469. https://doi.org/10.1037/a0039002

[18] Petrou, P., Demerouti, E. and Schaufeli, W.B. (2015) Job Crafting in Changing Organizations: Antecedents and Implications for Exhaustion and Performance. *Journal of Occupational Health Psychology*, **20**, 470-480. https://doi.org/10.1037/a0039003

[19] Tims, M., Bakker, A.B. and Derks, D. (2012) Development and Validation of the Job Crafting Scale. *Journal of Vocational Behavior*, **80**, 173-186. https://doi.org/10.1016/j.jvb.2011.05.009

[20] Machteld, V.D.H., Demerouti, E. and Peeters, M.C.W. (2015) The Job Crafting Intervention: Effects on Job Resources, Self-Efficacy, and Affective Well-Being. *Journal of Occupational and Organizational Psychology*, **88**, 511-532. https://doi.org/10.1111/joop.12128

[21] Ilgen, D.R., Fisher, C.D. and Taylor, M.S. (1979) Consequences of Individual Feedback on Behavior in Organizations. *Journal of Applied Psychology*, **64**, 349-371. https://doi.org/10.1037/0021-9010.64.4.349

[22] Longenecker, C.O. and Nykodym, N. (1996) Public Sector Performance Appraisal Effectiveness: A Case Study. *Public Personnel Management*, **25**, 151-164. https://doi.org/10.1177/009102609602500203

[23] Deci, E.L. and Ryan, R.M. (2004) Intrinsic Motivation and Self-Determination in Human Behavior. *Encyclopedia of Applied Psychology*, **3**, 437-448.

https://doi.org/10.1016/B0-12-657410-3/00689-9

[24] Zhou, J. (2003) When the Presence of Creative Coworkers Is Related to Creativity: Role of Supervisor Close Monitoring, Developmental Feedback, and Creative Personality. *Journal of Applied Psychology*, **88**, 413-422.
https://doi.org/10.1037/0021-9010.88.3.413

[25] Wrzesniewski, A., Berg, J.M. and Dutton, J.E. (2010) Managing Yourself: Turn the Job You Have into the Job You Want. Harvard Business Review, 36.

[26] Berg, J.M., Grant, A.M. and Johnson, V. (2010) When Callings Are Calling: Crafting Work and Leisure in Pursuit of Unanswered Occupational Callings. *Organization Science*, **21**, 973-994. https://doi.org/10.1287/orsc.1090.0497

[27] Gordon, H.J., Demerouti, E., Le Blanc, P.M. and Bipp, T. (2015) Job Crafting and Performance of Dutch and American Health Care Professionals. *Journal of Personnel Psychology*, **14**, 192-202. https://doi.org/10.1027/1866-5888/a000138

[28] Rudolph, C.W., Katz, I.M., Lavigne, K.N. and Zacher, H. (2017) Job Crafting: A Meta-Analysis of Relationships with Individual Differences, Job Characteristics, and Work Outcomes. *Journal of Vocational Behavior*, **102**, 112-138.
https://doi.org/10.1016/j.jvb.2017.05.008

[29] Vandewalle, D. (2003) A Goal Orientation Model of Feedback-Seeking Behavior. *Human Resource Management Review*, **13**, 581-604.
https://doi.org/10.1016/j.hrmr.2003.11.004

[30] Payne, S.C., Youngcourt, S.S. and Beaubien, J.M. (2007) A Meta-Analytic Examination of the Goal Orientation Nomological Net. *Journal of Applied Psychology*, **92**, 128-150. https://doi.org/10.1037/0021-9010.92.1.128

[31] Dweck, C. and Leggett, E. (1988) A Social-Cognitive Approach to Motivation and Personality. *Psychological Review*, **95**, 256-273.
https://doi.org/10.1037/0033-295X.95.2.256

[32] Vandewalle, D. and Cummings, L.L. (1997) A Test of the Influence of Goal Orientation on the Feedback-Seeking Process. *Journal of Applied Psychology*, **82**, 390-400.
https://doi.org/10.1037/0021-9010.82.3.390

[33] Podsakoff, P.M., Mackenzie, S.B., Lee, J.Y. and Podsakoff, N.P. (2003) Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, **88**, 879-903.
https://doi.org/10.1037/0021-9010.88.5.879

[34] Schoberova, M. (2015) Job Crafting and Personal Development in the Workplace: Employees and Managers Co-Creating Meaningful and Productive Work in Personal Development Discussions.

[35] Wingerden, J.V., Bakker, A.B. and Derks, D. (2016) The Longitudinal Impact of a Job Crafting Intervention. *European Journal of Work and Organizational Psychology*, **26**, 107-119.

[36] Chen, C.Y., Yen, C.H. and Tsai, F.C. (2014) Job Crafting and Job Engagement: The Mediating Role of Person-Job Fit. *International Journal of Hospitality Management*, **37**, 21-28. https://doi.org/10.1016/j.ijhm.2013.10.006

[37] Vogt, K., Hakanen, J.J., Brauchli, R., Jenny, G.J. and Bauer, G.F. (2015) The Consequences of Job Crafting: A Three-Wave Study. *European Journal of Work and Organizational Psychology*, **25**, 353-362.
https://doi.org/10.1080/1359432X.2015.1072170