## The Causality of Empowerment on Job Crafting: Focus on the

Moderating Variable of LMX

<u>Young-deuk Jung</u>\* · Byung-Nam Yu<sup>\*\*</sup> \*Department of Social Welfare Management, JeonJu Vision University \*\*Department of Administrative Management, Wonkwang University

# 임파워먼트와 잡 크래프팅의 인과구조: 조절변수를 중심으로

<u>정 영 득</u>\*·유 병 남\*\* \*전주비전대학교 사회복지경영학과 \*\*원광대학교 경영대학 경영학부

## Abstract

It is getting more intensified with the competition among participating companies for global market share in major industrial fields. The situation is accelerating especially within the top 5 market share, and these include electric vehicles, semiconductors, chemicals, and shipbuilding industries. The key to the advantage over the competition within a strategic group is which company leads the innovation in the field. On-the-ground innovation refers to job-based innovation. This paper aims to analyze job unit innovation in the structure of empowerment, LMX, and job crafting. Existing studies on job crafting have suggested a causal structure based on job design in the traditional sense, and there are not many scholars who study the causal structure using a job situational model. Therefore, this paper takes an approach from the perspective of the job situation. As a result of the study, LMX showed a moderating effect on the relationship between autonomy provision and job crafting. While, in the relationship between meaing-giving and cognitive crafting, there is no significant moderating effect shown on the relationship between autonomy provision and cognitive crafting. Therefore, the results of the analysis in this study suggest that the meaning of jobs and participation in decision-making should be managed in an integrated way in structural and design areas, not just qualitative factors such as empowerment and leadership.

#### Keywords : Empowerment, LMX(Leader Member Exchange), Job Crafting, Job Redesign

## 1. Introduction

Empowering leadership is leadership that gives members autonomy and authority in their work (Srivastava et al., 2006) and encourages members to cooperate while performing tasks actively and proactively (Pearce & Sims, 2002). According to the job crafting model, job control and human relationship needs are suggested as motivating factors to form job crafting (Wrzesniewski & Dutton, 2001).

LMX(Leader-Member Exchange) means an exchange between a leader and a member (Wayne & Green, 1993). To put it simply, if you provide feedback and support for members' participation in programs to improve their capabilities, members will be able to adapt to the organization more easily. In the

<sup>&</sup>lt;sup>†</sup>Corresponding Author : Young-deuk Jung, Department of Social Welfare Management, JeonJu Vision University, 235, Cheonjam-ro, Wansan-si Jeonju-si, South Korea, E-mail: ydjung@jvision.ac.kr

Received November 26, 2021; Revision December 19, 2021; Accepted December 20, 2021

opposite case, the member will not be able to adapt to the organization and will not be able to perform the job smoothly. In this study, the effect of empowerment on job crafting is analyzed by analyzing whether empowerment causes changes in the cognition, emotion, and behavior of employees and thus increases job crafting. In the study model, LMX was selected as the control variable.

#### 2. Theoretical Considerations

## 2.1 The Situational Relationship Between Empowerment and Job Crafting

Mills & Ungson(2003) suggested that a clear range of empowerment and a trust relationship are important for the activation of empowerment. Organizations endowed their people with resources, information, and power, but they won't get the results they want if they don't feel psychologically empowered. Because of these problems, scholars began to try to study empowerment from a psychological perspective. Arnold et al. (2000) studied the behaviors of leaders and their sub-dimensions that can affect the empowerment of organizational members.

Sub-factors of empowerment include example, participatory decision-making, coaching, and information sharing. expressed interest and presented communication. Ahearne et al. (2005) said that the sub-components of empowering leadership consist of enhancing job meaning, participating in decision -making, confident in high performance, and providing autonomy. They mentioned that as a sub-component of empowering leadership, it consists of two elements: autonomy and support. When members are empowered, they have the opportunity to participate in the organization's decision-making system, assume more responsibility, work more actively, and have a higher commitment to the organization (Liden et al., 2000). Also, in high-level

empowering organizations, employees have easier access to resources within the organization, such as knowledge and information (Spreitzer et al., 1997). In summary, when they feel they have more autonomy and have more confidence, they work more devotedly and pursue innovative behavior (Spreitzer et al., 1999) with a strong sense of responsibility and loyalty (Laschinger et al., 2004).

The concept of job crafting proposed by Wrzesniewski & Dutton(2001) can be understood as an action that directly changes the task area that organizational members must perform or the relational area that accompanies it. It means that members actively change the scope of work and relationships without being limited to the scope of work specified in the job description(Wrzesniewski & Dutton, 2001). Accordingly, Ghitulescu (2006) defined an action that an employee conceptualizes a task given to him, establishes a relationship with the relevant parties to complete it, and considers his/her job to be meaningful. It was defined as an action that creates a balance between the job demands and job resources given to them within the demands of the dimension. Also, Petrou et al. (2012) defined it as an action that seeks a challenging job and voluntarily reduces the level of demand from the organization. Tim & Bakker (2010) summarized this as a process of actively redesigning one's job.

## 2.2 Role of LMX between Empowerment and Job Crafting

Self-efficacy is formed through LMX. Kanten (2014) argued that self-efficacy is an important variable in predicting job crafting, and that people with high self-efficacy have higher confidence that they can do job crafting on their own, and that they will innovate more in actual jobs. Because job autonomy and positive feedback are helpful. Luthans & Thomas (1989) suggested the relationship between self-efficacy and LMX, and said that positive LMX enhances self-efficacy, which forms a sense of achievement, challenge, and trust. Tierney et al. (1999) argued that intrinsic motivation affects creativity, and that creative ideas are generated when challenging intellectual activities are satisfied. In addition, it was argued that people with high intrinsic motivation were more likely to be satisfied

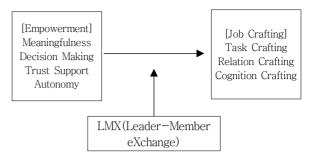
with their work(Amabile et al., 1994) and showed an active attitude toward knowledge sharing within the organization(Osterloh & Frey, 2000).

Hies(2007) suggested that high-level LMX activates communication and fosters innovation behavior of members. LMX contributes to organizational citizenship behavior, stimulates creativity and improves innovation (Ahmed, 2014). Bouckenooghe et al. (2009) confirmed through empirical analysis that the higher the trust in leadership, the higher the quality of the leader -member exchange relationship, the higher the self-efficacy of organizational members. Furthermore, Jassen & Van Yperen (2004) stated that the higher the quality of the LMX, the more innovative actions the members were able to take. As such, a causal structure is established that empowerment affects intrinsic motivation and positively affects job crafting through the control variable LMX.

#### 3. Research Model

#### 3.1 Model Building

Van Dyne & LePine(1998) stated that it is difficult to solve the problems faced by an organization in a culture led by only managers. This is because the participation of members is essential in the field of innovation promotion and performance. This is because innovation and performance require the creative participation of employees, and creative and challenging job performance is possible through job re-creation. Berg(2010) stated that the reason for the difficulty in re-creating jobs in the field is the lack of formal authority. He said that innovation requires empowerment and that positive LMX with members improves intrinsic motivation and induces job crafting. Therefore, this study aims to verify the moderating effect of LMX stage in the relationship between empowering leadership and job crafting.



<Figure 1> Research Model

Empowerment has a positive effect on employees job crafting (Demerouti et al. 2015). It has also been confirmed in domestic studies. They reported that job autonomy with guaranteed decision-making authority had a positive effect on job crafting, and argued that leader empowerment had a positive effect on job crafting. Discretionary authority and autonomy were suggested as antecedent variables for job crafting, and Konczak et al. (2000) suggested that self-directed decision-making and trust-giving were a factor in this empowerment. Deci & Ryan (2000) reported that LMX was a factor leading to self-directed activity. This is because members with intrinsic motivation can secure autonomy and influence through positive LMX. This is because positive LMX expands autonomy in technical and regulatory aspects of job performance(Amabile, 1988). In summary, it can be said that the causal structure that LMX controls empowerment and influences job crafting is established(Wrzesniewski & Dutton, 2001). Accordingly, the following hypotheses were established.

- Hypothesis 1: LMX will have an influence as a moderating variable in the relationship between job meaningfulness and task crafting.
- Hypothesis 2: In the relationship between promotion of decision-making participation and task crafting, LMX will have an effect as a moderating variable.
- Hypothesis 3: In the relationship between the expression of trust and task crafting, LMX will have an effect as a moderating variable.
- Hypothesis 4: In the relationship between autonomy provision and task crafting, LMX

will have an effect as a moderating variable.

- Hypothesis 5: LMX will have an effect as a moderating variable in the relationship between job meaningfulness and relation crafting.
- Hypothesis 6: In the relationship between promotion of decision-making participation and relation crafting, LMX will have an effect as a moderating variable.
- Hypothesis 7: In the relationship between expression of trust and relation crafting, LMX will have an effect as a moderating variable.
- Hypothesis 8: In the relationship between autonomy provision and relation crafting, LMX will have an effect as a moderating variable.
- Hypothesis 9: In the relationship between job meaningfulness and cognition crafting, LMX will have an effect as a moderating variable.
- Hypothesis 10: In the relationship between promotion of decision-making participation and cognition crafting, LMX will have an effect as a moderating variable.
- Hypothesis 11: In the relationship between the expression of trust and cognition crafting, LMX will have an effect as a moderating variable.

Hypothesis 12: In the relationship between autonomy provision and cognition crafting, LMX will have an effect as a moderating variable.

#### 3.2 Variable and Sample Design

Empowerment is a leader's act of sharing authority with subordinates and raising the level of autonomy and responsibility of subordinates (Lorinkova et al., 2013). In this study, using the scale developed by Ahearne et al. (2005), 12 items were used to measure the components of enhancing job meaningfulness, promoting participation in decision-making, expressing trust and providing autonomy. 5-point scale was used. Job crafting is a physical and cognitive change in the occupational and relational boundaries of an individual's work (Wrzesniewski & Dutton, 2001). This study is divided into task crafting, relation crafting, and cognition crafting, and the Job Crafting Questionnaire (JCQ) developed by Slemp & Vella-Brodrick(2013) was used. LMX was measured by adopting the 7 questionnaires developed by Graen & Uhl-Bien (1995) and the questionnaire used in the study by Harris, Li & Kirkman(2014).

592 of the 650 questionnaires distributed

	Item	Persons	Ratio		Item	Persons	Ratio
	under high school	54	9.6%	Sex	Male	354	63.1%
	vocational school	88	15.7%	Sex	Female	207	36.9%
Education	University	225	40.1%		1-5	143	25.5%
	Master	136	24.2%	Work	6-10	174	31%
	doctor	58	10.3%	Hour	11-15	120	21.4%
	20	291	51.9%		Over 15	124	22.1%
	30	128	22.8%		employee	343	61.1%
Age	40	98	17.5%	Spot	end manager	103	18.4%
	Over 50	44	7.8%	- Spot	secondary manager	86	15.3%
	Over 50	44	1.0%		senior manager	29	5.2%
	construction industry	102	18.2%		R&D	61	10.9%
	manufacturing	98	17.5%		administrative affairs	83	14.8%
1.00	finance	55	9.8%	1	production technology	102	18.2%
classificat ion	IT	44	7.8%	classific ation	sales	119	21.2%
1011	education	57	10.2%	ation	Education	85	15.2%
	service industry	177	31.6%		oto	111	19.8%
	etc	28	5%		etc	111	19.070

<Table 1> Demographic Characteristics

between March and July 30, 2021 were recovered. And among them, 31 copies were excluded as invalid responses, and a total of 561 questionnaires were used for the actual statistical analysis. Among the 561 respondents used in this study, the highest level of education was college graduate with 225(40.1%), high school graduate 54(9.6%), junior college graduate 88(15.7%), and master's degree 136(24.2%). and 58(10.3%) of Ph.D. By age distribution, those in their 20s and over accounted for the most with 291(51.9%), those in their 30s with 128(22.8%), those in their 40s with 98 (17.5%), and those in their 50s with 44(7.8%). As for the length of tenure, 174 people(31%) had the most 10 years of tenure, 1-5 years 143 people (25.5%), 11-15 years 120 people(21.4%), 15 years or more 124(22.1%) were found. As for the job type of the respondents, sales workers accounted for the most with 119(21.2%), followed by R&D workers with 61(10.9%), management/office workers with 83(14.8%), and production/ technical workers with 102(18.2%). 85 persons(15.2%) were in education

variable	item	Coefficient	S.E	C.R	AVE	CR
	EL1	.745	-	-		
Meaningfulness	EL2	.725	.073	13.707	0.648	0.755
	EL3	.665	.070	13.033		
	EL4	.806	-	-		
decision-making	EL5	.920	.048	24.915	0.756	0.902
	EL6	.878	.048	23.962		
	EL7	.823	-	-		
Confidence	EL8	.829	.057	19.075	0.619	0.829
	EL9	.703	.066	16.617		
	EL10	.831	_	-		
Autonomy	EL11	.835	.050	19.786	0.642	0.843
	EL12	.734	.069	17.787		
	LMX1	.681	_	_		
	LMX2	.818	.080	17.466		
	LMX3	.777	.067	16.695		
LMX	LMX4	.855	.079	18.147	0.591	0.909
	LMX5	.831	.079	17.711		
	LMX6	.675	.053	14.698		
	LMX7	.721	.068	15.609		
	TC1	.895	_	-		
	TC2	.780	.028	23.699		
Task Crafting	TC3	.855	.034	28.122	0.686	0.916
	TC4	.873	.033	29.343		
	TC5	.725	.040	20.977		
	CC1	.810	_	-		
	CC2	.784	.037	20.328		
Relation Crafting	CC3	.858	.045	22.763	0.609	0.886
	CC4	.665	.054	16.535		
	CC5	.773	.046	19.959		
	RC1	.779	-	-		
	RC2	.709	.060	17.269		
Cognition Crafting	RC3	.791	.033	19.632	0.612	0.887
	RC4	.758	.036	18.662		
	RC5	.866	.048	21.760		

<table 22<="" th=""><th>• Results</th><th>of</th><th>confirmatory</th><th>factor</th><th>analysis</th><th>for</th><th>the</th><th>entire conce</th><th>ept</th></table>	• Results	of	confirmatory	factor	analysis	for	the	entire conce	ept
---	-----------	----	--------------	--------	----------	-----	-----	--------------	-----

and 111 persons (19.8%) were other workers.

In this study, in order to measure the concept of each variable used to validate the research model, the validity and reliability test were verified in the following way with respect to the results collected from the survey respondents. Concentrated validity and discriminant validity were verified by performing exploratory factor analysis and confirmatory factor analysis using statistical analysis methods SPSS 26.0 and AMOS 24.0. In this study, the results of exploratory factor analysis and reliability analysis are only summarized to present statistical significance(It omits the presentation in a table and reveals only the result value) and the concrete result table of statistical analysis is intended to present concentrated validity and discriminant validity. This is because concentrated validity and discriminant validity converge on exploratory factor analysis and reliability results.

First, as a result of the validity analysis of empowerment, the value of KMO was 0.789 and the value of Bartlett's sphericity was 3098.011, which was statistically significant. As a result of feasibility analysis for LMX, the KMO value(Kaiser Meyer Olkin) was 0.930 and the significance probability was 0.000. The LMX dispersion explanatory power was 64.717%, exceeding the 60% standard. In the reliability analysis, 0.755 for promoting participation in decision-making, 0.901 for autonomy, 0.816 for confidence, 0.819 for job significance, and 0.908 for LMX reliability. The reliability of task crafting was 0.912, relation crafting was 0.879, and cognition crafting was 0.873. If we look at the results of the reliability analysis of the variables, all of them are above 0.7 and have high reliability. In this study, confirmatory factor analysis was performed for each latent variable using AMOS 24.0 for the construct concept that had been subjected to reliability verification and exploratory factor analysis prior to analysis of the structural equation model (SEM). The results were <Table 2> is shown.

According to the analysis results in <Table 2>, the standardized factor loadings of all variables were 0.5 or more, and all of them were found to be statistically significant. The concept reliability(CR) values were all over 0.7, and all mean variance (AVE) values were over 0.5, suggesting the validity of the construct concept. This study was confirmed through AMOS 24.0 to verify the fit of the model of confirmatory factor analysis. As a result of the analysis, the index of goodness of fit of the model  $x^2$  /DF was 2.260 and Goodness of Fit Index(GFI), Adjusted Goodness of Fit Index(AGFI) Normed fit index(NfI), Incremental fit indices(IFI), Tucker Lewis index(TLI), and Comparative Fit index(CFI) were 0.881, 0.860, 0.894, 0.938, 0.931, 0.938. Root Mean Square Error of Approximation (RMSEA) was found to be 0.047 and it was confirmed that the level of goodness of fit was high. It was judged that the acceptability of the overall latent variable measurement model was sufficient.

From the analysis results according to <Table 3>, the correlation coefficients between each variable were all 0.1 or more, indicating that they were significant at the level of significance p<0.01, so there is a correlation with each other. Looking at previous studies, it is generally argued that multicollinearity is possible when the correlation is

	1	2	3	4	5	6	7	8	9	AVE
Meaning-fulness	1									.508
decision-making	.274**	1								.756
Confidence	.340**	.299**	1							.619
Autonomy	.220**	.255**	.290**	1						.642
LMX	.419**	.435**	.471**	.467**	1					.631
Task Crafting	.224**	.237**	.150**	.243**	.250**	1				.591
Relation Crafting	.372**	.422**	.439**	.422**	.555**	.256**	1			.686
Cognition Crafting	.361**	.369**	.263**	.366**	.474**	.196**	.383**	1		.609

<Table 3> Results of Discriminant validity analysis

\*p<0.05, \*\*p<0.01

0.8 or more. In this study, all correlations between variables were less than 0.6, and it was judged that there was no problem that could cause multicollinearity. According to the results of the discriminant validity analysis, the value with the highest correlation coefficient between the two variables(task crafting) was 0.555, and the mean extraction(AVE) value of task crafting was 0.686. When comparing the squares of the correlation coefficients, the two mean variance extraction (AVE) values were both high, so it was judged that discriminant validity was secured. Comparing the square of this correlation coefficient with the AVE value, it can be seen that the AVE value is higher. As the discriminant validity of the research model was verified, the final validity of the research model was confirmed.

## 3.3 Hypothesis Testing

An analysis was conducted to test the hypothesis that LMX would have an effect as a moderating variable in the relationship between empowerment and job crafting. Hypotheses are to test the moderating effect of LMX.

<Table 4> examines the moderating effect of LMX between empowerment and task crafting. In the relationship between age, rank, and task crafting. LMX had a negative (-) moderating effect, and had no significant effect. Looking at the overall result, it is judged that there is no collinearity problem because the Durbin-Watson's values are all close to the reference value of 2. The results of analysis by introducing empowering leadership into the regression equation as an independent variable are  $\triangle R^2 = 0.042$ , F=30.764 (p<0.001) as shown in <Table 4>, and the results show that the meaning of the job, promotion of participation in decision-making, and high performance were found. The regression coefficients for the expression of confidence and autonomy for task crafting were  $\beta = -0.009$ ,  $\beta = 0.055$ ,  $\beta = 0.121$ (p<0.01), and  $\beta = 0.135$  (p<0.001). In the relationship between the expression of trust and task crafting, LMX showed a moderating effect in the relationship between the provision of autonomy and task crafting. In relation to task crafting, it was found that

		Task Crafting					
step variable	1 step $\beta$	2 step $\beta$	$3 \operatorname{step} \beta$				
gender	0.001	0.001	-0.017				
Education	0.108**	0.102**	0.113**				
age	-0.070	-0.068	-0.045				
tenure	0.151**	0.150**	0.140*				
rank	-0.059	-0.057	-0.050				
Meaningfulness	0.153***	0.145***	0.107**				
decision-making	0.235***	0.226***	0.166***				
Confidence	0.228***	0.228***	0.185***				
Autonomy	0.243***	0.233***	0.203***				
LMX		0.061	0.076*				
Meaningfulness*LMX			-0.009				
decision-making*LMX			0.055				
Confidence*LMX			0.121**				
Autonomy*LMX			0.135***				
$\mathbb{R}^2$	0.395	0.399	0.441				
Adjusted R <sup>2</sup>	0.385	0.388	0.427				
$\Delta R^2$	0.395***	0.003	0.042***				
<u>F</u>	40.031***	36.451***	30.764***				
Durbin-Watson		2.105					

<Table 4> Moderating effect between empowerment and task crafting

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

aton wavishis		Relation Crafting	
step variable	1 step β	2 step β	3 step β
gender	0.041	0.041	0.029
Education	-0.053	-0.056	-0.054
age	-0.072	-0.071	-0.059
tenure	0.244***	0.243***	0.234***
rank	-0.039	-0.038	-0.023
Meaningfulness	0.216***	0.211***	0.167***
decision-making	0.228***	0.223***	0.174***
Confidence	0.045	0.045	0.011
Autonomy	0.221***	0.216***	0.188***
LMX		0.034	0.058
Meaningfulness*LMX			-0.022
decision-making*LMX			0.099*
Confidence*LMX			-0.012
Autonomy*LMX			0.206***
R <sup>2</sup>	0.304	0.305	0.355
Adjusted R <sup>2</sup>	0.292	0.292	0.339
$\Delta R^2$	0.304***	0.001	0.050***
F	26.704***	24.106***	21.474***
Durbin-Watson		1.847	

<Table 5> Moderating Effect Between Empowerment and Relation Crafting

\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001

LMX had no significant effect on the moderating effect. Therefore, Hypothesis 5, 7 are rejected.

<Table 5> examines the moderating effect of LMX between empowerment and relation crafting. In the relationship between educational background, age, rank, and relation crafting, LMX had a negative moderating effect and had no significant effect. Looking at the overall result, it is judged that there is no collinearity problem because the Durbin -Watson's values are all close to the reference value of 2. The results of analysis by introducing empowerment into the regression equation as an independent variable are  $\triangle R^2 = 0.050$ , F = 21.474(p < 0.001) as shown in <Table 5>, and the results show that the meaningfulness, promotion of participation in decision-making and high performance were obtained. The regression coefficients of expression of confidence and autonomy in relation crafting were  $\beta = -0.022$ ,  $\beta = 0.099 (p < 0.05)$ ,  $\beta = -0.012$ , and  $\beta = 0.206 (p < 0.001)$ . In the relationship between promotion of decision-making and relation crafting, LMX showed a moderating effect in the relationship between autonomy provision and relation crafting. It

was found that LMX did not have a significant effect on the moderating effect on the relationship of relation crafting. In 2 step  $\beta$ , LMX was input, but the regression variance(R<sup>2</sup>) did not increase(0.001), so it was analyzed that LMX itself had little effect. However, in 3step  $\beta$ , meanfulness\*LMX and confidence \*LMX showed subtle negative influences, but decision-making\*LMX and autonomy \*LMX were analyzed to have a positive effect on relationship crafting. In summary, innovation in the workplace is the result of suggesting the need for autonomy and empowerment of specific and practical job performers.

<Table 6> examines the moderating effect of LMX between empowerment and cognition crafting. In the relationship between age and cognition crafting, LMX had a negative moderating effect and had no significant effect. The results showed that it was important to enhance the meaning of the job, promote participation in decision-making, and high performance. Regression coefficients for expression of confidence and autonomy for task cognition crafting were  $\beta = 0.110(p < 0.01)$ ,  $\beta = 0.105(p < 0.05)$ ,

		Cognition Crafting				
step variable	1 step $\beta$	2 step $\beta$	3 step β			
gender	0.035	0.035	0.015			
Education	0.002	-0.004	0.025			
age	-0.045	-0.043	-0.025			
tenure	0.103	0.101	0.099			
rank	0.132**	0.135**	0.135*			
Meaningfulness	0.156***	0.147***	0.099*			
decision-making	0.220***	0.210***	0.128**			
Confidence	0.260***	0.259***	0.204***			
Autonomy	0.078*	0.066	0.017			
LMX		0.067	0.096**			
Meaningfulness*LMX			0.110**			
decision-making*LMX			0.105*			
Confidence*LMX			0.137**			
Autonomy*LMX			0.036			
$R^2$	0.306	0.310	0.366			
Adjusted R <sup>2</sup>	0.295	0.298	0.350			
$\Delta R^2$	0.306***	0.004	0.056***			
F	27.046***	24.757***	22.543***			
Durbin-Watson		1.873	1			

<Table 6> Moderating Effect Between Empowerment and Cognition Crafting

\**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001

 $\beta = 0.137 (p < 0.01)$ , and  $\beta = 0.036$ . In the relation between promotion of participation in decision -making and cognition crafting, LMX showed a moderating effect in the relationship between promotion of participation in decision-making and cognition crafting, expression of trust in high performance and cognition crafting. On the other hand, in the relationship between meaningfulness and cognition crafting, LMX did not have a significant moderating effect on the relationship between autonomy provision and cognition crafting. Therefore, Hypothesis 12 is rejected. Even in cognitive crafting, LMX was input in  $2 \operatorname{step} \beta$ , but the regression variance  $(\mathbb{R}^2)$  did not increase (0.04), so it was analyzed that LMX itself had little effect. In 3step  $\beta$ , meaningfulness\*LMX, confidence\*LMX, decisionmaking\*LMX were analyzed to have a positive effect on cognitive crafting. In summary, for the improvement of cognitive crafting, it can be said that the results suggesting that the job performer's awareness of the meaning and importance of the job itself is important.

#### 4. Conclusion

Limited competition in the high-tech industry, which is getting fiercer, is becoming a decisive factor in determining the aspect of competition in terms of market and field innovation. Due to the reality of the industry, recent management research also focuses on market and field innovation. In this sense, Empowerment and LMX are attracting attention again. Nevertheless, it can be said that the main cause of the insufficient utilization of practical research results is the ambiguous conceptual definition of innovation and the research model that overlooks the contextual fit relationship between empowerment and LMX. Therefore, this study tried to overcome these limitations.

In this study, through empirical analysis, it was confirmed that LMX had a partially significant moderating effect on the relationship between empowerment and job crafting. In particular, it was analyzed to perform the function of situational control variables in the relationship between empowerment and task crafting and relation crafting and cognition crafting. In addition to expressing trust in members' performance and providing autonomy to members, LMX has a positive moderating effect on task crafting. On the other hand, LMX did not have a significant effect on task crafting in relation to job meaning enhancement and participation in decision making.

The results of this analysis suggest that job meaningfulness and decision-making participation should be pursued in an integrated manner in the structural and design areas, rather than by only qualitative factors such as empowerment. In addition, it was analyzed that LMX had a positive moderating effect in the relation of cognition crafting. It does not affect concrete and practical task crafting, but it does make a positive contribution to the relationship between members and managers. Managers should recognize that it is difficult to induce the task innovation of members through leadership alone. In summary, it means that the decentralization of the organizational structure and organizational culture must be innovated in advance. In addition, it was confirmed that LMX had a positive moderating effect on the relationship between promoting participation in decision-making, providing autonomy, and relationship crafting. There is a point here to be emphasized in this study.

### 5. References

- [1] M. Ahearne, J. Mathieu, A. Rapp(2005), "To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance." Journal of Applied Psychology, 90(5):945–955.
- [2] I. Ahmed, K. W. I. Wan, S. M. Amin(2014), "Guan xi network and leader member: The impetus for employee creative development." Asia–Pacific Journal of Business Administration, 6(1):64–77.
- [3] T. M. Amabile(1988), "A model of creativity and innovation in organizations." Research in Organizational Behavior, 10:123–167.
- [4] T. M. Amabile, K. G. Hill, B. A. Hennessey, E. M. Tighe(1994), "The work preference inventory:

Assessing intrinsic and extrinsic motivational orientations." Journal of Personality and Social Psychology, 66(5):950–967.

- [5] J. A. Arnold, S. Arad, J. Rhoades, F. Drasgow(2000), "The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviors." Journal of Organizational Behavior, 21(3):249–269.
- [6] J. M. Berg, A. Wrzesniewskia, J. E. Dutton(2010), "Perceiving and responding, challenges in job crafting at different ranks: When proactivity requires adaptivity." Journal of Organizational Behavior, 31(2-3):158-186.
- [7] D. Bouckenooghe, G. Devos, H. Broeck(2009), "Organizational change questionnaire-climate of change, process, and readiness: Development of a new instrument." The Journal of Psychology, 143(6):559–599.
- [8] E. L. Deci, R. M. Ryan(2000), "The 'what' and 'why' of goal pursuits: Human needs and the selfetermination of behavior." Psychological Inquiry, 11(4):227-268.
- E. Demerouti, A. B. Bakker, J. R. Halbesleben(2015), "Productive and counterproductive job crafting: A daily diary study." Journal of Occupational Health Psychology, 20(4):457-469.
- [10] B. Ghitulescu(2006), "Job crafting and social embeddedness at work." Unpublished doctoral dissertation, University of Pittsburgh.
- [11] G. B. Graen, M. Uhl-Bien(1995), "Relationship based approach to leadership: Development of leader-member exchange theory of leadership over 25years." The Leadership Quarterly, 6(2): 19-247.
- [12] T. B. Harris, N. Li, W. R. Boswell, X. A. Zhang, Z. Xie (2014), "Getting what's new from newcomers: Empowering leadership, creativity, and adjustment in the socialization context." Personnel Psychology, 67(3):567–604.
- [13] R. Hies, J. D. Nahrgang, F. P. Morgeson(2007),
  "Leader-member exchange and citizenship behaviors: A meta-analysis." Journal of Applied, 92(1):269-277.
- [14] O. Janssen, N. W. Van Yperen(2004), "Employees goal orientation, the quality of leader-member exchange, and the outcomes of job performance

and job satisfaction." Academy of Management Journal, 47(3):368-384.

- [15] L. J. Konczak, D. J. Stelly, M. L. Trusty (2000), "Defining and measuring empowering leader behaviors: Development of an upward feedback instrument." ducational and Psychological Measurement, 60(2):301–313.
- [16] P. Kanten (2014), "The antecedents of job crafting: Perceived organizational support, job characteristics and self-efficacy." European Journal of Business and Social Sciences, 3(5):113–128.
- [17] R. C. Liden, S. J. Wayne, R. T. Sparrowe (2000), "An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes." Journal of Applied Psychology, 85(3):407-416.
- [18] H. K. S. Laschinger, J. E. Finegan, J. Shamian, P. Wilk(2004), "A longitudinal analysis of the impact of workplace empowerment on work satisfaction." Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(4):527–545.
- [19] N. M. Lorinkova, M. J. Pearsall, H. P. Sims (2013), "Examining the differential longitudinal performance of directive versus empowering leadership in teams." Academy of Management Journal, 56(2): 73–596.
- [20] F. Luthans, L. T. Thomas (1989), "The relationship between age and job satisfaction: Curvilinear results from an empirical study - A research note." Personnel Review, 18(1):23–26.
- [21] P. K. Mills, G. R. Ungson(2003), "Reassessing the limits of structural empowerment: Organizational constitution and trust as controls." Academy of management Review, 28(1):143–153.
- [22] M. Osterloh, B. S. Frey (2000), "Motivation, knowledge transfer, and organizational forms." Organization Science, 11(5):538–550.
- [23] C. L. Pearce, H. P. Sims Jr. (2002), "Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors." Group Dynamics: Theory, Research, and Practice, 6(2):172 - 197.

- [24] P. Petrou, E. Demerouti, M. C. Peeters, W. B. Schaufeli, J. Hetland (2012), "Crafting a job on a daily basis: Contextual correlates and the link to work engagement." Journal of Organizational Behavior, 33(8):1120–1141.
- [25] G. R. Slemp, D. A. Vella-Brodrick (2013), "The job crafting questionnaire: A new scale to measure the extent to which employees engage in job crafting." International Journal of Wellbeing, 3(2),:126-146.
- [26] G. M. Spreitzer, M. A. Kizilos, S. W. Nason(1997), "A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain." Journal of Management, 23:679-704.
- [27] G. M. Spreitzer, S. C. De Janasz, R. E. Quinn(1999), "Empowered to lead: The role of psychological empowerment in leadership." Journal of Organizational Behavior: The International Journal of Industrial." Occupational and Organizational Psychology and Behavior, 20(4):511-526.
- [28] A. Srivastava, K. M. Bartol, E. A. Locke(2006), "Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance." Academy of Management Journal, 49(6):1239–1251.
- [29] P. Tierney, S. M. Farmer, G. B. Graen (1999), "An examination of leadership and employee creativity: The relevance of traits and relationships ." Personnel Psychology, 52(3):591-620.
- [30] M. Tims, A. B. Bakker (2010), "Job crafting: Towards a new model of individual job redesign." Journal of Industrial Psychology, 36(2):1–9.
- [31] L. Van Dyne, L., J. A. LePine (1998), "Helping and voice extra-role behaviors: Evidence of construct and predictive validity." Academy of Management Journal, 41(1):108–119.
- [32] S. J. Wayne, S. A. Green(1993), "The effects of leader-member exchange on employee citizenship and impression management behavior." Human Relations, 46(12):1431-1440.
- [33] A. Wrzesniewski, J. E. Dutton(2001), "Crafting a job: Revisioning employees active crafters of their work." Academy of Management Review, 26(2): 79-201.

## 저자 소개



## 정영득

현)전주비전대학교 사회복지경영학과 교수 명지대학교 대학원 산업경영공학과 박사 한일장신대학교 사회복지대학원 석사 호주 Queensland University에서 Visiting Scholar



#### 유병남

원광대학교 경영대학 경영학부 부교수 전 한국교양교육협의회 부회장 전 원광대학교 융합교양대학 학장 전 원광대학교 SW중심대학사업단 단장