Leader Member-Exchange and Job Involvement Impact on Innovative Work Behavior

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Abstract

Innovation in the development of science and technology is important in increasing company's competitiveness, especially in human resources. The study aimed at analysing leader-member exchange and job involvement on innovative work behavior. 205 employees of PT. Nindya Karya were collected for this study. The study results revealed that leader-member exchange in the company had positive impact on innovative work behavior, and employees' job involvement had positive impact on innovative work behavior. Furthermore, interaction between leaders and employees and employees' job involvement had significant impact on increasing innovative work behavior. It suggested that leaders should be able to encourage employees' trust, and give concern for employees to encourage employees to contribute in achieving company goals as well as in improving job performance.

Keywords: *Leader-Member Exchange, Job Involvement, Innovative Work Behavior.*

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A. INTRODUCTION

PT. Nindya Karya (Persero) is a subsidiary of BUMN which is engaged in construction services, Engineering Procurement Construction, and Investment. PT. Nindya Karya (Persero) is a contractor company that has continued to develop innovation by involving related resources, as well as to work on various types of construction work and its project locations spread across all regions in Indonesia and it also employs workers from various ethnic groups and cultures of the archipelago.

The increasing need to innovate was driven by the low level of innovation in Indonesia. The 2019 Global Innovation Index (GII) assessment placed Indonesia at position of 85 out of 129 countries, in terms of aspects of the development of science and technology, human capital and research, and creative output. Innovation in industrial sector is one of the keys to encourage national economic growth and development (BPS, 2019).

Innovation programs in the construction industry are generally carried out through project-based organizations. The project-based character of the construction industry is often seen as a barrier to innovation (Gann & Salter, 2000; Havenvid, 2015), but on the other hand, the temporary nature of construction project organization can also be seen as a driving force to continue the innovation (Slaughter, 2000). Getz and Robinson (2003) revealed that 80% of new ideas for innovation were generated by employees. Individual innovation in the organization

is called innovative work behavior. Akram, Lei, and Haider (2016) stated that innovative work behavior is fundamental foundation to improve organizational performance.

Innovative work behavior (IWB) is individual's desire to be innovative. Spegelaere (2014) said that innovative work behavior reflects the creation of something new or different. Innovative work behavior is change-oriented because it involves the creation of new products, services, ideas, procedures, or processes. Some indicators of innovative behavior are the opportunity to explore, generate ideas, fight for ideas and implement ideas in working groups (Jong & Hartog, 2008). Opportunity exploration and idea encouragement are related to skills, intrinsic motivation and relevant processes (T. M. Amabile & Pratt, 2016). Employees or individuals involved have the same opportunity to formulate ideas to improve project performance. At this stage, obstacles usually occur due to different level of individual expertise, environmental conditions that are not supportive or motivating, and the communication process that is obstructed between individuals and other parties, especially with the project management.

Innovative work behavior (IWB) is individual behavior aimed at creating, introducing and implementing ideas, processes, products, or procedures that benefited the organization. Innovative work behavior is often considered to have similar meaning with innovation. West and Farr in Palazzeschi et al. (2018) defined innovative work behavior as the intentional introduction and application, within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society.

Carmeli et al. (2006) said that innovative work behavior is a multi-stage process in which an individual recognizes problems in which he/she creates new ideas and solutions, works to promote and builds support and also produces prototype or model that can be applied for organizational use and benefit. A similar opinion was conveyed by Tuominen & Toivonen (2011), innovative work behavior is all activities aimed to contribute to the creation and utilization of new things that useful for an organization.

In organizational, innovative work behavior can be characterized as intra or extra in individual roles. Janssen (2003) argued that innovative work behavior goes beyond defined role expectations and is not directly or explicitly recognized by formal reward systems. Innovative work behavior is seen as free behavior that is not explicitly expected and no formal reward is given. Likewise, Dorenbosch et al. (2005) and Sanders et al. (2008) stated that innovative work behavior included extra role behavior. However, a different opinion was conveyed by Tuominen & Toivonen (Tuominen & Toivonen, 2011) who concluded that innovative behavior could be in the form of intra- and extra-role behavior, based on qualitative data. They said that innovative behavior can be divided into three categories: can be depended; only supported, or cannot be supported by the organization. The consequence of innovative behavior is intra-role and extra-role behavior. The extent to which certain

innovative behaviors are expected from the employees depends on the hierarchical position of the employees and their job description.

Furthermore, leadership is one of the main factors influencing employees' innovative work behavior. An organizational leader plays an important role in motivating, inspiring, and stimulating employees' work processes (Turek & Turek, 2013) through relationships built to improve employees' skills (Hammond, et al., 2011). Innovative work behavior can be influenced by leader-member exchange (LMX). The study results conducted by Kim & Koo (2017) showed that Leader-Member Exchange (LMX) is a leadership model that had significant positive correlation with IWB.

Leader-member exchange (LMX) theory was developed from the vertical dyad linkage theory (VDL theory). LMX is a concept that focuses on the quality of relationship between leaders and employees to understand the impact of the leaders' role on employees, teams or organization. LMX theory stated that a leader distinguishes his/her relationship with employees. It is possible for leaders to form equal relationship among the employees but forming good relationship requires time and energy sacrifice. Employees also have different work qualities and motivations so the leaders will often differentiate their relationship with the employees.

High-exchange relationship is characterized by high levels of trust, like, and respect and it involves reciprocal exchange of expectation. Leaders deliver results that employees' desire, such as interesting tasks, additional responsibilities, and greater rewards. In low-quality exchange relationship, employees are only expected to perform formal requirements of their jobs, and additional benefits are not provided by the leaders (Yuk1 et al., 2009).

The process of developing two-way relationship from the LMX concept is theoretically based on role theory and social exchange theory (Gottfredson et al., 2020). In organizational practice, harmonious relationship between leaders and employees will create high-quality LMX relationship. Leaders in high-quality LMX relationship rely heavily on their employees to act in their place and encourage them to undertake more responsible activities (Graen & Uhl-Blen, 2018).

In role theory, a leader has expected role towards the employees and the extent to which employees can meet his/her expectations will help forming relationship (Kang & Stewart, 2007). Vidyarthi et al. (2014) viewed that leaders influence their employees through unique, trust-based and influence-based relationship that occurs between individuals. Correspondingly, C. Liao et al. (2017) stated that LMX concerns of affective relationship aspects and reflects the exchange relationship between leaders (managers) and employees. The results study of Hiller et al. (2011) was in period of 1985 to 2009 he found that as many as 83% of LMX studies measured LMX from employees' point of view. This was done to avoid biased results when carried out by the leaders.

Furthermore, job involvement is one factor that influences innovative work behavior. Employees with high job involvement will feel harmony between their

personal and organizational goals (Carson & Carson, 1995; Cohen, 1995), they even willing to use their free time to improve their work performance (Mudrack, 2004). Job involvement is an important construct both from the employees and the organization. Job involvement is employees' mind-set and perception towards their job involvement. A person who feels involved and contributes to successful work will gain substantial self-esteem. The higher the job involvement, individuals will devote more time and effort into their work. Thus, job involvement represents the degree to which work is central to individual's self-concept or identity. Job involvement is different from job satisfaction. It combines high job pleasure with high activity. Job satisfaction is passive while job involvement is active. Job involvement has become one of the effective tools used to increase employees' productivity by increasing their participation and commitment to their work (T. Khan et al., 2011).

In organizational practice, physical job involvement can be seen in the form of direct individual participation and contribution. Allport (1943) conceptualized job involvement as the degree to which an employee participates in his/her work and fulfills his/her needs such as prestige, self-esteem, autonomy, and self-respect. Personal involvement in work depends on the extent to which an individual seeks self-expression and actualization in his/her work. A person who makes important contribution to the success of company has the opportunity to set the pace of his/her own work and self-determination which leads to strengthen his/her job involvement. Wickert (1951) suggested that this type of participatory involvement can be measured by asking the employees to what extent they feel they actively participate in their work. Lawler & Hall (1970) emphasized that job involvement is the extent to which a person perceives his/her total work situation as important part of his/her life and becomes his/her central and identity due to the opportunities provided to him/her to fulfill important needs.

B. METHOD

Basically, this study aimed to analyze the impact of leader-member exchange and job involvement on innovative work behavior. The sample of this study was 207 employees at PT. Nindya Karya (Persero). The sampling technique used random sampling. The data analysis was quantitative data with correlation test, simple regression test, and F test.

C. RESULT AND DISCUSSION

1. Statistic Description

Innovative work behavior data had empirical scores between 26 to 50 and the score range was 24. The data calculation obtained average of 41.40; standard deviation of 4.745; variance of 22.515; the median 42.00; and mode 44. It can be seen in table 1 as follows:

Table 1. Distribution of Frequency of Innovative Work Behavior (Y)

Interval Y					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-28	1	,5	,5	,5
	29-31	7	3,4	3,4	3,9
	32-34	8	3,9	3,9	7,8
	35-37	27	13,2	13,2	21,0
	38-40	39	19,0	19,0	40,0
	41-43	40	19,5	19,5	59,5
	44-46	55	26,8	26,8	86,3
	47-49	27	13,2	13,2	99,5
	50-52	1	,5	,5	100,0
	Total	205	100,0	100,0	

The leader-member exchange data had empirical scores between 25 to 6 and the score range was 35. The data calculation obtained average of 43.52; standard deviation of 6.792; variance of 46.133; the median 44.00; and the mode 46. It can be seen in table 2 as follows:

Table 2. Distribution of Frequency of Leader-Member Exchange (X_1)

Interval X2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-28	5	2,4	2,4	2,4
	29-32	12	5,9	5,9	8,3
	33-36	14	6,8	6,8	15,1
	37-40	33	16,1	16,1	31,2
	41-44	39	19,0	19,0	50,2
	45-48	56	27,3	27,3	77,6
	49-52	33	16,1	16,1	93,7
	53-56	8	3,9	3,9	97,6
	57-60	5	2,4	2,4	100,0
	Total	205	100,0	100,0	

Job involvement data had empirical scores between 26 to 60 and the score range was 34. The data calculation obtained average of 45.41; standard deviation of 6.705; variance of 44.960; the median 46.00; and the mode 49. It can be seen in table 3 as follows:

Table 3. Distribution of Frequency of Job Involvement (X_2)

Interval X3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26-29	3	1,5	1,5	1,5
	30-33	3	1,5	1,5	2,9
	34-37	19	9,3	9,3	12,2
	38-41	38	18,5	18,5	30,7
	42-45	36	17,6	17,6	48,3
	46-49	45	22,0	22,0	70,2
	50-53	38	18,5	18,5	88,8
	54-57	18	8,8	8,8	97,6
	58-61	5	2,4	2,4	100,0
	Total	205	100,0	100,0	

2. Normality Test

Table 4. Normality Test

One-Sample Kolmogorov-Smirnov Test

		X2	X3	Y
N		205	205	205
Normal Parameters[a,b]	Mean	43.52	45.41	41.40
	Std. Deviation	6.792	6.705	4.745
Most Extreme Differences	Absolute	.084	.070	.113
	Positive	.043	.052	.050
	Negative	-.084	-.070	-.113
Test Statistic		.084	.070	.113
Asymp. Sig. (2-tailed)		.001[c]	.017[c]	.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

From table 4 in the Kolmogorov-Smirnov column it showed that the significance value for leader-member exchange (X_1) was 0,001, job involvement (X_2) was 0,017 and innovative work behavior (Y) was 0,000. Since the significance values for all variables were greater than 0.05, it can be concluded that data population of leader-member exchange (X_1), job involvement (X_2) and innovative work behavior (Y) were with normal distribution.

3. Linearity Test

Based on the output table below, the value of F_{count} = 56,403 and the significance value (Sig.) in the F test was 0.000. Since Sig. 0.000 <0.05, it can be concluded that the leader-member exchange had impact on innovative work behavior or it was significant. Thus, the regression test requirements had been met.

Table 5 Linearity Test Y-X_1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	998.672	1	998.672	56.403	.000[b]
	Residual	3594.323	203	17.706		
	Total	4592.995	204			

a. Dependent Variable: Y

b. Predictors: (Constant), X1

Based on the output table below, the value of F_{count} = 70,682 and the significance value (Sig.) in the F test was 0.000. Since Sig. 0.000 <0.05, it can be concluded that job involvement had impact on innovative work behavior or it was significant. Thus, the regression test requirements had been met.

Table 6. Linearity Test Y-X_2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1186.200	1	1186.200	70.682	.000[b]
	Residual	3406.795	203	16.782		
	Total	4592.995	204			

a. Dependent Variable: Y

b. Predictors: (Constant), X2

4. Hypotheses Test

Based on data processing used IBM SPSS Statistics 25, the output for regression analysis was shown in table 7 below:

Table 7. Multiple Regression Analysis of Leader-Member Exchange (X_1) and Job Involvement (X_2) on Innovative Work Behavior (Y)

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	20.446	2.133		9.586	.000
	X1 (LMX)	.206	.045	.295	4.542	.000
	X3 (Job Involvement)	.264	.046	.373	5.734	.000

a. Dependent Variable: Y (Innovative Work Behavior)

Positive Impact of Leader-Member Exchange (X_1) on Innovative Work Behavior (Y). The hypotheses tested were:

H_0: $\beta_{y1} \geq 0$

H_1: $\beta_{y1} < 0$

Based on the calculation of path coefficients using SPSS 25 as shown in the table. The value of β_{Y1} = 0,295, with sig = 0,000. Because sig 0,000 <0,05, then H_0 was rejected, this meant that leader-member exchange (X_1) had direct positive impact on innovative work behavior (Y).

Positive Impact of Job involvement (X_2) on Innovative Work Behavior (Y). The hypotheses tested were:

H_0: $\beta_{y2} \geq 0$

H_1: $\beta_{y2} < 0$

Based on the calculation of path coefficients, it obtained value of β_{Y2} = 0,373 with sig = 0,000. Because sig 0,001 < 0,05, then H_0 was rejected, this meant job involvement (X_2) had direct positive impact on innovative work behavior (Y)

The study results were in line with Graen & Cashman (1978) study results that showed that in high-quality relationships employees were willing to spend time outside of their main task. By granting autonomy to the employees, leaders can create working environment that encourage free thinking, information exchange and freedom to explore new ideas or ways of dealing with problems. The existence of

space for exploration and leaders interaction was believed to be a factor related to employees' innovative work behavior (Basu & Green, 1997).

Scott and Bruce (1994) said that employees with high-quality LMX were more likely to convince their work group to accept new ideas in order to build the support and collaboration needed. Employees with high-quality LMX were also perceived as more powerful and influential because they have better access to valuable information and resources from the leaders compared to employees with low-quality LMX (Sparrowe & Liden, 1997). As a result, employees with high LMX will gain respect and trust from their team members. With high LMX, employees will feel more confident to promote and realize new ideas in the group. In accordance with this, Yukl (Yukl et al., 2009) argued that one benefits of high-quality relationship for an employee is personal support and approval from the leaders. In the case of employees with higher quality exchanges, the leaders were likely to be more supportive because their past experiences with those employees had been favorable. Support from superiors is one of factors in developing, fighting for and implementing ideas as indicator of individual innovative work behavior.

Empirically, the relationship of LMX with innovative work behavior had been shown in several studies by researchers. Study of Sander et al. (2010) showed that LMX was positively related to innovative behavior in the workplace through the mediation of HR satisfaction. Similarly, study of Schermuly et al. (2013) proved that there was significant positive contribution between LMX and innovative work behavior.

Furthermore, the study results were also in line with study by Huang et al. (2019) showed that there was person-job fit in influencing innovation behavior by increasing job involvement and career commitment strengthen positive influence of person-job fit on job engagement and innovation behavior. Then, the study findings of Thakur & Kumar (2015) showed that employees with high job involvement can increase innovative work behavior compared to employees with low job involvement. Thus, employees who engage in creative activities and engage in mutually influencing behavior in their work teams were able to lead their team members to achieve higher levels of creativity.

The results of Tanoto & Sutarhanji (2019) study stated that intrinsic value (meaningfulness of work) as well as work processes and culture (impact) had direct impact on innovative behavior and indirect impact through job involvement. Similarly, Singh and Sarkar (2018) said that employees tended to be more innovative when their involvement with work that was important to them. Thus, high job involvement can encourage employees' innovative work behavior.

D. CONCLUSION

The results of the study confirmed that the leader-member exchange and job involvement had impact on increasing innovative work behavior. Therefore, leaders must be able to generate sense of trust, be more concern to their employees so as to

encourage employees to contribute in achieving company goals as well as in improving performance.

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