The practice of job crafting and its impact on job outcomes: An empirical study

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ABSTRACT

This study aims to investigate the effect of job crafting practices on job outcomes (work engagement and job satisfaction). This research was conducted on workers at Perseroan Terbatas (PT). Petra Arun Gas (PAG) with a working population of 180 people. Samples were taken as many as 123 people based on Krejcie and Morgan Sample Tables (in Sekaran & Bougie, 2009, pp. 254-255). The selection of sample members was carried out using the simple random sampling method. Primary data is obtained by distributing questionnaires to all samples. Data were analyzed using simple linear regression analysis tools with the help of SPSS. The results of the research data analysis show that job crafting has a significant effect on the two dependent constructs, namely work engagement and job satisfaction.

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Introduction

Job crafting starts with the habit of employees taking advantage of opportunities to create their new works that can support their main work (Wrzesniewski & Dutton, 2001; Tims & Bakker, 2010). Then Job crafting is considered important to encourage individuals to consider how they act, interact and think about their work and to redesign and personalize aspects of their work in ways that encourage engagement, job satisfaction, resilience, and developing (Hetland, Hetland, Bakker, & Demerouti, 2018; Cheng & O-Yang, 2018). Job crafting is started by employees, from the bottom up, and not by managers from the top down, this is the principle of crafting (Wingerden & Poell, 2017), there are three types of work craft techniques: task, relational, and cognitive.

Job crafting has been a significant subject of discussion since the Fourth Industry emerged. This impact can vary from job transfer to significant job creation, which has implications for employee knowledge, work skills, and behavior (World Economic Forum, 2017). Organizations that are responsive to change continually reform them internally and as a consequence they must facilitate employee rework (Menachery, 2018). This is deliberately done so that they want to excel in their market ranks. Employees can proactively optimize the compatibility between their work (change) with their own talents, skills and interests with the job crafting (Dash & Vohra, 20189).

New interest in the phenomenon of craft work offers a promising direction for research in organizational psychology. Job crafting is a specific form of proactive work behavior that requires changes and re-shaping of tasks or relationships that shape work so that work remains challenging, motivating and healthy (Demerouti, 2015). Rudolph, Katz, Lavigne, & Zacher (2017) highlighting job crafting has an important relationship with the involvement, satisfaction, and performance that triggered this research. This research is also reinforced by a view that job crafting is a specific form of proactive work behavior that involves employees who actively change the characteristics of their work (Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). Recent studies show that work crafts can result in increased work engagement, creativity and job performance (Gordon, Demerouti, Le Blanc, Bakker, Bipp & Verhagen, 2018; Bruning & Campion, 2019; Luu, 2020).

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This study wants to find out whether there is a direct change in work engagement and job satisfaction from job crafting owned by employees at a manufacturing company. This is a different condition and situation from the previous researchers (Chen, Yen, & Tsai, 2014; Solberg & Wong, 2016; Ibrahim & Yusra, 2016; Karatepe & Eslamlou, 2017). We believe that the more researchers researching job crafting, the more evidence there will be for the importance of job crafting in various organizations.

Literature Review

Job Crafting and Work Engagement

Job crafting can be defined as employee-initiated behavioral change that aims to align their work (and work environment) with their own preferences, motives, and passions (Wrzesniewski & Dutton, 2001). Employees involved in the craft of work proactively work based on the compatibility between their talents, strengths and interests with a changing work environment. By doing that, employees can stay challenged in their work, and maintain their level of excitement and energy at the same time.

The work needs to be redesigned and its definition so that the work makes it easier for them to finish it with maximum results (Berg, Dutton, Wrzesniewski, 2013; Tims, Derks, & Bakker, 2016). According to Leana, Appelbaum, & Shevchuk (2009), craft work takes two forms: individual craft and collaborative craft. Individual craft occurs when an employee plays an active role in changing the limits of his duties while shaping the actual way of working. Collaborative craft refers to employees who work together to determine how to change task boundaries to meet shared work goals.

Work engagement, defined as a state of mind associated with positive work that is characterized by enthusiasm, dedication, and absorption (Schaufeli & Bakker, 2004). Work engagement refers to the relationship of the employee with his or her work, whereas employee engagement may also include the relationship with the organization (Mäkikangas, 2018). Work engagement is "utilizing the members of the organization for their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally and mentally during the role play". Three aspects of work motivation are cognitive, emotional and physical involvement (Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001). In the JD-R model, work craft behavior by an individual that increases work resources and job demands that challenge theorizing to have a positive impact on work engagement (Bakker & Demerouti, 2014). However, the formulation of work demands that are obstructing are not considered to be directly related to work involvement (Bakker & Demerouti, 2014).

According to Bakker and Demerouti (2007), each job consists of two job characteristics; job demands and resources (work). The JD-R model states that the combination of high job demands and high resources leads to high levels of motivation, involvement and work involvement (Tuckey, Bakker, & Dollard, 2012). Employee work involvement with their work can encourage increased organizational performance. The involvement of the work itself is caused by high job crafting from workers (Tims, Bakker, & Derks, 2013).

Previous research that examined job crafting and work engagement sepeti (Harju, Hakanen, & Schaufeli, 2016; Wingerden & Poell, 2017; Ogbuanya & Chukwuedo, 2017; Mäkikangas, 2018). From several views about job crafting and work engagement that have been described above, we can formulate hypotheses as follows:

Ho1: There is no influence of job crafting on work engagement

Ha1: There is the influence of job crafting on work engagement

Job Crafting and Job Satisfaction

Job satisfaction can be defined as a measure of one's work or experience in terms of positive emotions or enjoyment at work (Locke, 1976) and people's feelings (like or dislike) at work (Spector, 1997). These definitions refer to individual emotions that tend to lead to being more productive, creative, and committed to work. Employee satisfaction also refers to job satisfaction which can be associated with creativity for the work occupied. Job satisfaction is a feeling of achievement and success of workers in work. Generally considered to be directly related to productivity and personal well-being (Cheng & O-Yang, 2018). Job satisfaction implies doing work that one enjoys, doing it well and being rewarded for one's efforts. Job satisfaction further implies enthusiasm and happiness with one's work. Job satisfaction is the main key that leads to recognition, income, promotion, and the achievement of other goals that lead to feelings of fulfillment (Ibrahim & Yusra, 2016). In addition, job crafting behavior can reduce fatigue, because fatigue comes from psychological stress, as demonstrated by the JD-R model (Tims, Bakker, & Derks, 2012). Such fatigue and tension have a negative impact on job satisfaction (Lee & Ok, 2012; Lewin & Sager, 2007).

The relationship between craft work and job satisfaction has been examined in the service industry (Tims et al., 2013; Cheng, Chen, Teng, & Yen, 2016). Employee satisfaction levels can increase if they have the skills they can do at their jobs (Tims et al., 2013). From some of the views described above, we believe that job crafting has an impact on job satisfaction. We therefore formulate in a hypothesis like the following:

Ho2: There is no influence of job crafting on job satisfaction

Ha2: There is the influence of job crafting on job satisfaction

Figure 1: Conceptual Framework

Research and Methodology

Participants

This research was conducted at *Perseroan Terbatas* (PT). Perta Arun Gas (PAG), a company engaged in the field of Regasification. The company has a population of 180 employees. This study took a sample of 123 people using the Krejcie and Morgan Sample Tables in Sekaran & Bougie (2009). Member samples taken for respondents use the simple random sampling method (Cooper & Schindler, 2014).

Data Collection

Primary data were obtained by distributing questionnaires to 123 respondents who had been selected based on simple random sampling. The questionnaire consisted of two parts, the first part asking about respondents' characteristics such as gender, age, marital status, and the respondent's last education. The second part contains questions about the variables studied. There are five variables observed, namely, job crafting as independent variables, work engagement, and job satisfaction as dependent variables.

Measurement

Job crafting is measured using previous research (Cheng & O-Yang, 2018) consisting of 12 items, modified to 8 items for this research (eg "I rearranged my work to make it easy"; "I made changes to the job to make it more quality").

Work engagement is measured based on previous research (Ogbuanya & Chukwuedo, 2017), quoted from The Shortened Version of the Utrecht Work Engagement Scale (UWES), consisting of 17 instruments that contain three dimensions (vigor, dedication, and absorption). This research adjusts to 8 instrument items, sample instrument questions for vigor (eg "In my workplace, I feel full of energy"; examples of instruments for dedication (eg "I am enthusiastic about my work"), and for instrument absorption (eg "Time flies when I'm working").

Job satisfaction based on previous research (Cheng & O-Yang, 2018), consists of five instrument items (eg "I feel my work is valuable"; "In my work, I feel I am doing something useful").

All instruments were measured using a five-point Likert scale from "strongly disagree" to "strongly agree." Questions related to respondent characteristic data such as gender, age, education, marital status using nominal scale with SPSS assistance

Data Analysis

Testing the normality, validity, and reliability of the data is done before testing the hypothesis using SPSS. Meanwhile, to test the research hypothesis using simple linear regression analysis tools with the formula:

$$Y_{(1-2)} = a + bX$$

Where :

Y = Dependent Variable

X = Predictor Variable or Independent Variable

a = constant

b = regression coefficient (slope); the magnitude of the response generated by the predictor.

$$a = \frac{(\sum y) (\sum x^2) - (\sum x) (\sum xy)}{n(\sum x^2) - (\sum x)^2}$$

$$b = \frac{n(\sum xy) - (\sum x) (\sum y)}{n(\sum x^2) - (\sum x)^2}$$

Decision of the analysis results, if the results of the regression analysis show a significance value ($p > 0.0$) then H_0 is accepted, and if the significance value ($p < 0.0$), then H_a is accepted, this applies to both hypotheses tested.

Result and Discussion

Characteristics of Respondents

Table 1 is the characteristics of the respondents consisting of gender, age, marital status, and latest education. The results of the analysis using SPSS show that male respondents are much larger than female respondents. In terms of age, the respondents indicated that 74% of all respondents were over 50 years old. Furthermore, it is seen from the marital status where in general the respondents are married. The last education of the respondents was nominated by the Diploma (D3) education level, followed by the last education level of the bachelor. For more details, it can be seen in Table 1

Table 1: Characteristics of Respondents

Characteristics	Description	Frequency	Percentage
Gender	Male	111	90.2
	Female	12	9.8
Age	Total	123	100 %
	< 50 years old	91	74.0
	> 50 years old	32	26.0
Marital Status	Total	123	100%
	Married	89	72.4
	Single	34	27.6
Education	Total	123	100%
	High school	20	16.3
	Diploma (D3)	60	48.8
	Bachelor	41	33.3
	Others	2	1.6
Total		123	100%

Source: Primary Data (processed), 2020

Reliability

Table 2 is the reliability test results. Reliability test is important in analyzing research results. This test is to see whether the instruments used in research are reliable. The instrument is said to be reliable if the instrument is consistent from time to time. The analysis shows that Cronbac's Alpha index of the three variables is greater than 0.60, so it can be concluded that the instruments used to measure Job Crafting, Work Engagement, and Job Satisfaction are all reliable.

Table 2: Reliability Test Results

No	Variable	Total Item	Cronbach's Alpha		Decision
			Calculate	Standards	
1.	Job Crafting	6	0.675	0.60	Reliable
2.	Work engagement	8	0.758	0.60	Reliable
3.	Job satisfaction	5	0.803	0.60	Reliable

Source: Primary Data (processed), 2020

Normality

Table 3 is the results of the research data normality test. Normality test is a test that is carried out with the aim of assessing the distribution of data in a group of data or variables, whether the distribution of the data is normally distributed or not. Normality test is useful for determining data that has been collected is normally distributed or taken from a normal population. This study used the Kolmogorov Smirnov method to test the normality of the data.

The results of the analysis in Table 1 show that the significance value of 0.200 is greater than 0.05, so it can be concluded that the data for the job crafting variable in predicting the work engagement variable are normally distributed.

Table 3: Data Normality Test Results (Work engagement)

One-Sample Kolmogorov-Smirnov Test		
N		Standardized Residual
N		123
Normal Parameters ^{a,b}	Mean	0.0761563
	Std. Deviation	0.77560731
Most Extreme Differences	Absolute	0.068
	Positive	0.068
	Negative	-0.064
Test Statistic		0.068
Asymp. Sig. (2-tailed)		0.200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Primary Data (processed), 2020

Table 4 results of the data normality test of the crafting variable with the job satisfaction variable, the test results show that the data for the variable is normally distributed. This can be seen in Table 4 where the significance value of 0.095 is greater than 0.05.

Table 4: Data Normality Test Results (Job satisfaction)

One-Sample Kolmogorov-Smirnov Test		
N		Standardized Residual
N		123
Normal Parameters ^{a,b}	Mean	0.1784005
	Std. Deviation	0.63120537
Most Extreme Differences	Absolute	0.079
	Positive	0.071
	Negative	-0.079
Test Statistic		0.079
Asymp. Sig. (2-tailed)		0.095 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: Primary Data (processed), 2020

Effect of Job Crafting on Work Engagement

Table 5 is the analysis result of the effect of job crafting on work engagement using simple linear regression analysis tools with the help of SPSS. The results of the regression analysis showed that job crafting affected work engagement at a significance level of 0.000, which is smaller than 0.05. These results support prior research (Gordon et al., 2018; Bruning & Campion, 2019; Luu, 2020).

Table 5: Effect of Job Crafting on Work Engagement

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	2.472	0.279		8.866
	X	0.360	0.069	0.431	5.248

a. Dependent Variable: Y1

Source: Primary Data (processed), 2020

Table 6 is the test results for the coefficient of determination. The coefficient of determination is often defined as the amount of the independent variable's ability to explain the variance of the dependent variable. The results of the analysis show that the R Square value is 0.185, this means that 18.5% of the work engagement variable (Y1) can be explained by the job crafting variable (X). The rest (81.5%) is influenced by other factors outside this model.

Table 6: Coefficient of Determination of The Effect of Job Crafting on Work Engagement

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.431 ^a	0.185	0.179	0.36743
a. Predictors: (Constant), X				
b. Dependent Variable: Y1				

Source: Primary Data (processed), 2020

Effect of Job Crafting on Job Satisfaction

Table 7 analysis results of the effect of job crafting on job satisfaction using simple linear regression analysis tools. The results of the analysis show that the significance value of 0.001 is less than 0.05 ($p < 0.05$), it can be concluded that job crafting has a significant effect on job satisfaction. Meanwhile, to see the magnitude of the influence can be seen in Table 8 through the coefficient of determination test. The results of this study reinforce the findings (Tims et al., 2013; Cheng et al., 2016; Ibrahim & Yusra, 2016; Adam, Ibrahim, Ikramuddin, & Syahputra, 2020).

Table 7: Effect of Job Crafting on Job Satisfaction

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	2.533	0.380		6.667	0.000
	X	0.319	0.094	0.296	3.413	0.001

a. Dependent Variable: Y2

Source: Primary Data (processed), 2020

Table 8 test results of the coefficient of determination or the magnitude of the influence of job crafting on job satisfaction. From the results of the analysis (Table 8) shows that the R Square value is 0.088, which means that 8.8% of the job satisfaction variable can be predicted by the job crafting variable, while the rest (99.91%) is predicted by other factors not included in this model.

Table 8: Coefficient of Determination of The Effect of Job Crafting on Job Satisfaction

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.296 ^a	0.088	0.080	.50077
a. Predictors: (Constant), X				
b. Dependent Variable: Y2				

Source: Primary Data (processed), 2020

Figure 2 is the implementation of the analysis results in a conceptual framework. From the display of Figure 2, it can be seen that the effect of job crafting on work engagement is 0.431 (43.1%), and the effect of job crafting on job satisfaction is 0.296 (29.6%). In other words, job crafting has a close relationship with work engagement and job satisfaction, respectively 43.1% and 29.6% and the relationship is significant at the level ($p < 0.05$).

Figure 2: Conceptual Framework of Test Results

Conclusion

The conclusion from the results of this study refers to the hypothesis that was built. From the results of the analysis several conclusions can be drawn. First, the results of the analysis found a significant effect between job crafting on work engagement. This means that every increase in the implementation of job crafting will have an impact on increasing the implementation of work engagement. Second, the results of the analysis also found a significant effect of job crafting on job satisfaction. This means that any increase in job crafting activities will have an impact on increasing the level of worker satisfaction.

This study uses three constructs, namely job crafting as an independent construct and job engagement and job satisfaction as the dependent construct. These constructs are very limited, especially the dependent constructs. Furthermore, the time limit given by the

sponsor is relatively short, only one month and a half, so that the respondents we can draw from the available population are relatively few. In addition, the support of research funding is relatively small, so this research cannot be studied in a broader and more detailed manner.

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