

THE EFFECT OF MODERATION OF JOB COMMITMENT AND SATISFACTION ON THE EFFECT OF JOB DESIGN TOWARDS THE PERFORMANCES OF HUMAN RESOURCES: A STUDY ON NATIONAL CONSULTANT FOR CONSTRUCTION SERVICES IN INDONESIA

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***Abstract:** The era of free trade is a commitment in the context of international life that must be faced with full of competition. Observing the fundamental problems of human resources' performance and existence of construction services to face global competition, then this research study referred to the analysis unit of human resources' performance of Yodya Karya Company (Persero) consultant construction services with a humanistic relation structural approach (commitments and achievements) and scientific management (organizational culture and job design) This research was conducted in order to analyze the influence of design work on the human resources performance through the moderating effect of commitment and job satisfaction. The research was conducted on 720 employees of PT. Yodya Karya (Company), both at the headquarters and at branch level in Indonesia. Sampling using proportional random sampling so set that serve as many as 205 respondents. The analytical method used to test the hypothesis of the research is Structural Equation Modeling (SEM). The results showed that the effect of moderating variables work commitment and job satisfaction on job design influence on human resources performance.*

***Keywords:** Moderation, Job Design, Work Commitment, Job Satisfaction, Performance of Human Resources*

1. INTRODUCTION

The Multilateral Cooperation Frameworks such as GATT (*General Agreement on Tariffs and Trade*) and Regional Agreements such as NAFTA (*The North American Free Trade Agreement*) as well as UE (*Union of Europe*) emphasize the alignment of economy and business world with the high-quality HR structure (Bapekin, 2003). Through the AFLA

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(*Asean Free Labor Area*) cooperation in 2004, the ASEAN countries emphasized similar things. Furthermore, the Asia-Pacific through APEC in 2010 and world-level – WTO in 2020 plans high-quality Human Resources as a part of strategic partnership in the economic globalization era (Djatnika *et al.*, 2005). It reflects the importance of support from reliable and high-performance Human Resources as a requirement for the existence in the world's economic globalization competition. The problem is that there is a gap in Human Resources between the countries participating in the global economic era and the most fundamental gap is the quality of Human Resources, as the key factor that is very determining in winning the business competition in global economy.

In macro, the indicator of the quality of Indonesian human resources is quite concerning, as it was ranked 111 of 182 countries in the 2009 Human Development Index. Even if it is compared with the Southeast Asian countries, Indonesia is under Malaysia, Singapore, Thailand, Philippines and Vietnam, even though those countries learned a lot from Indonesia in the 80's era on the development of human resources. Indonesia is categorized in the medium human development category (developing countries). The complexity of the problems in the process of human resource management of the organization / company is a reflection of the position and the strategic role of Human Resources who view Human Resources as the most valuable asset or intellectual capital (Alwi, 2001: 57-58; Gomez *et al.*, 2001) in which the ability of social collectivity within an organization is a source of competitive advantage without differentiating the institution or organization. Thus, the concept and dynamics of the problems in implementing the HR management should be put into the framework of HR performance achievement itself.

Looking at the problems and challenges of the construction services business world, related to the role of human resources as a key factor, then the development of the construction services sector in national and regional scope needs a discovery as the fundamental reference in the elaboration of this research analysis unit. Furthermore, the conception (conceptual) study of the aspect of relevance of human resources and construction services as business units that have important roles in the infrastructure development of economic of the region require vigorous mapping as described below in order to support the development of the basic idea of this research, that was conducted on the unit of analysis HR performance in consultant construction services PT. Yodya Karya (Company) with a structural humanistic relation approach (commitment, job satisfaction and achievement) and scientific management (job design).

This research aim is to investigate The Effect of Moderation of Job Commitment and Satisfaction on The Effect of Job Design Towards The Performances of Human Resources: A Study On National Consultant For Construction Services. Originality for this paper shows: (1) Using moderation effect of job commitment and satisfaction on the effect of job design towards the performances of human resources, (2) Location of study as originality (no previous research for this relationship): Construction Service in all Indonesia.

2. LITERATURE REVIEW

Construction services is one of the activities in the economic, social, and cultural fields that play important roles in achieving various targets in infrastructure construction in order to support the realization of national development goals. Various laws and regulations that apply have not oriented well to the interests of the development of construction services in accordance with their characteristics that result in an underdeveloped business climate in favor of increasing the competitiveness optimally and the public interest, there is a need of regulatory framework on construction infrastructure development including a law concerning Construction Services.

The issue of the global competition era has been touted by many people few years ago, but it seems that our responsiveness to the future conditions is still too low, at least in the field of construction services in particular for the small and medium enterprises. It is no exaggeration to say that the lack of response to improve performance and productivity at the small and medium group level is more due to the weakness of the sinergetic power in the community construction services to build them into a strong power. This condition would be detrimental to us as a nation which has abundant human resources, the power we have should put us in a position with a competitive advantage and we should not satisfied merely in that comparative advantage (Achmad and Nagara, 2005).

In the application process of human resource management there are various problems found in organizing the human resources, among others; discipline, motivation, morale, promotion, training, wages, and health. Therefore, based on the concept above, the important conclusion is that human resource management is a process that continues to develop in accordance with the environmental needs of the era, which means that the human being is a key element in constructing the company's organization that is very vital in the perspective of a new human resources management (Carneval et al. ,, 1990; Noon, 1992). The differences in the basic concept according to the management application approach can be viewed from the personnel management and Human Resource Management (HRM) standpoints, which are actually the role shifts or changes, in the human resource management model. HRM became a new problem in the 1960s, before approximately 1990s, that dominated the personnel management. Between both of them, it is clear that there are some differences in the scope and level. HRM includes issues related to the development, use and protection of human resources. While personnel management is more related to the human resources within the company. HRM is actually a recognizing movement towards the importance of human element as a quite-potential resource, which should be developed in such way to give more maximum contribution to the organization and to the development itself. (Gomez, 1995: 2-3).

Performance is a function of motivation and the ability to complete a task or a job, so that someone must have a certain degree of willingness and ability. Someone's ability is considered insufficient to complete a task without a clear understanding on

the work that has to be done and on how to do the work (Hersey and Blanchard, 1993; 235). Thus, performance is determined or influenced by ability, motivation, and opportunity factors. The humanistic human resource development paradigm approach explains that performance is a result that does not stand alone but is related to the level of job satisfaction, and rewards, ability and individual nature. Performance is basically what is conducted and not by the employee. Employee performance is what is influencing how much he/she contributes to the organization, includes the quantity, quality, and period of output, attendance, and cooperation (Mathis and Jackson, 2002: 78).

The idea of job design appeared in the literature published in the early 1770s. A British economist, Adam Smith, in his book entitled *The Wealth of Nations*, suggested that light work increases dramatically when every worker was given a small task. This type of specialized job designs improves productivity dramatically and builds scientific management phase which has started a hundred years ago. Started in the 1950s, some managers such as Thomas Watson, a founder of IBM, extended the principles of engineering works. The popular methods in the 1950s and 1960s were work rotation and work extension. Both programs were designed to take advantage from labor specialization of work technique approach, and to reduce the negative effects of the engineering job satisfaction and employee performance. According to Robbins (2006: 247) the way in which the tasks are combined to create individual jobs have a direct effect on the performance and job satisfaction. The pioneers of science-based manager such as Frederick W. Taylor and Frank Gilbreth in Luthans (2005: 560) systematically examined the work using time and motion analysis technique in order to maximize human efficiency in a work. Taylor mentioned that the task design may be a single element that is most prominent in scientific management.

By observing the developments described above, then the employee performance is affected by various or multiple variables that may include employee satisfaction, as well as their competencies (Rivai and Basri, 2005: 7) which are the elements of personality of each employee. Working patterns and behaviors for employees in their duties will be turned into a work culture that also affect their performances, so that it needs a good handling in the context of HRM. Human as a social being certainly can not be separated from the demands to fulfill their basic needs, which is expected to be fulfilled from the execution of the work, therefore, in order to improve the performance of employees, a company needs to grant them remuneration or fair compensation based on their contribution to the company. Regarding the development of the field of human resources management, then the various studies, especially related to the employee performance has been carried out in the form of empirical facts about HR performance with different approaches and assessment aspects. Some of the basic elements in HRM of human resources behavior relevances of construction services sector such as; job design, job satisfaction, etc. have been studied comprehensively.

3. METHODOLOGY

This research was conducted with a purpose to analyze the effect of job design and organizational culture on performance by using commitment as a mediating variable. In accordance with the purpose of the research, the population of this study is all employees in the organizational environment of a national consultant PT. Yodya Karya (Persero), both at the headquarters and branch level in Indonesia. Data this study takes a survey of studies dissertation of Hamid (2010). Based on the staffs' portfolio per December 31, 2007, recorded in the headquarters of PT. Yodya Karya and every work unit of the branches throughout Indonesia (Sirait, 2007), the total staff is 720 people working in the work units organization; (1). 121 Structural staffs, (2). 532 Functional staffs, and (3). 67 Supporting staffs. Based on the characteristics of the management position considered in this study, the sampling of the population was proportionally determined by assuming a population of 720 employees is relatively homogeneous, the sampling of the group population was conducted by using proportional random sampling that is by determining the sample proportionally between populations based on the characteristics of management position in the research object. Referring to the approach, the SEM modeling with a population of 720 people, the number of samples to be used as respondents are 205 people, that is derived from the number of indicators of 23 times 9 samples = 207 and 2 samples are invalid. Considering that the number of employees at the branch work unit's V and VIII was relatively small, then the sampling in both branches was not conducted. The analytical method used to test the hypothesis of the research was Structural Equation Modeling (SEM).

A model involving moderation (Hypothesis 1-3)

$$Y = b_1 X + b_2 M_1 + b_3 M_2 + b_4 X * M_1 + b_5 X * M_2 + b_6$$

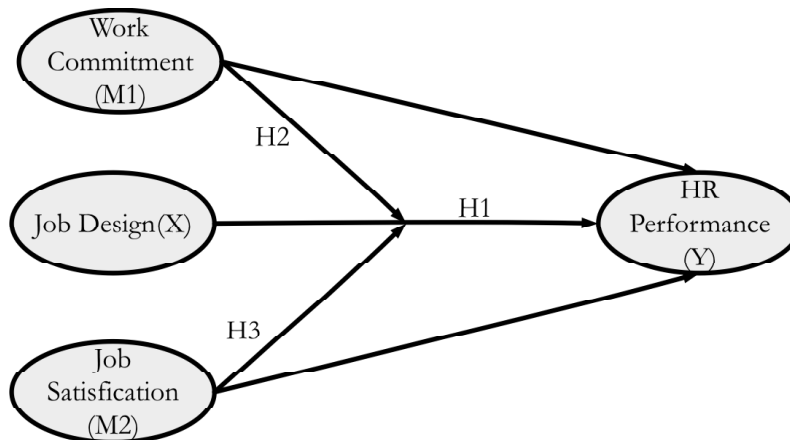


Figure 1: Conceptual Framework

which

Y = Performance of Human Resouerce

X = Job Design

M₁ = Work Commitment

M₂ = Job Satisfaction

4. RESULT AND DISCUSSION

4.1. Measurement Model

The following table shows the average and outer loading values of each indicator in each study variable.

Table 1
The Average Value of Each Indicator and Outer Loading

<i>Variable</i>	<i>Indicator</i>	<i>Loading Factor</i>	<i>CR</i>	<i>Variance Extracted</i>	<i>P. value</i>
Job Design (X)	Variations Ability (X.1)	0.696	0.986	0.923	0.000
	IdentityWork (X.2)	0.660			0.000
	Task significance (X.3)	0.576			0.000
	Freedom of Employment (X.4)	0.572			0.000
	Feedback (X.5)	0.751			Fix
Work Commitment (M1)	Work Involvement (M1.1)	0.525	0.966	0.932	0.000
	Passion Work (M1.2)	0.689			0.000
	Employment Initiatives (M1.3)	0.552			Fix
Job Satisfaction (M2)	Responsibility (M2.1)	0.520			0.000
	Personal Development (M2.2)	0.740			0.000
	Interest in the Work (M2.3)	0.697			Fix
Human Resource Performance (Y)	Quality of Work (Y.1)	0.693	0.926	0.914	0.000
	Quantity of Work (Y.2)	0.625			0.000
	Timeliness (Y.3)	0.527			Fix
	Low-Level Error (Y.4)	0.718			0.000

Based on Table 1, the results show that all indicators significantly measure its variables respectively. The analysis also shows that the most powerful indicator as a measurement of Job Design (X) is Feedback (X.5) with a loading factor value of 0.751. On Job Commitment variable (M1) it is known that the most powerful indicator as a measurement is Passion (M1.2) with a loading value of 0.689. On Job Satisfaction variable (M2) it is known that the most powerful indicator as a measurement is Personal Development (M2.2) with a loading value of 0.740. On HR Performance variable (Y) it is known that the most powerful indicator as a measurement is Low-Level Error (Y.4) with a loading value of 0.718.

4.2. Analysis Result: SEM

Goodness Of Fit. The goodness of fit test of overall models, according to the results of SEM analysis, is to determine if a hypothetical model is supported by empirical data, is shown in Table 2 below:

Table 2
Test Result Goodness of Fit Overall Model

Criteria	Cut-of value	Result	Result
Chi Square	Low	58.82	Good Model
p-value	$2 > 0.05$	0.591	
CMIN/DF	< 2.00	0.949	Good Model
RMSEA	< 0.08	0.000	Good Model
GFI	> 0.90	0.927	Good Model
AGFI	> 0.90	0.893	Poor Model
TLI	> 0.95	1.020	Good Model
CFI	> 0.95	1.000	Good Model

The goodness of fit test of overall based Table 2 shows that 6 of the 7 criteria indicates a good model which are Chi Square, CMIN/DF, RMSEA, GFI, TLI and CFI. According of Arbuckle and Wothke, in solimun (2002). According Arbuckle and Wothke, in Solimun (2002), the best criteria used us an indication of goodness model is Chi Square/DF less than 2, and RMSEA which under 0.08. In this research, the value of CMIN / DF and RMSEA has met the cut-off value. Therefore, the model SEM in this research fit and unfit for use, so do the interpretation for further discussion.

SEM Analysis. The second part of SEM analysis is the interpretation of structural models. Structural model shows the relationship between the study variables. The coefficient of structural models states the magnitude of relationship between a variable to another variable. There is a significant effect between a variable to another variable, if the value of P-value is < 0.05 . In SEM, there are two effects known as direct and indirect effects. The results of the analysis are summarized in Table 3 and Figure 1 for the direct effect and Table 4 for the indirect effect.

Table 3
Structural Model SEM: Direct Effect

No	Relationship	Coefficient	P-value	Conclusion
1	X toY	0.242	0.024	Significant
2	M1 toY	0.310	0.001	Significant
3	M2to Y	0.298	0.003	Significant
4	X_M1to Y	0.218	0.002	Significant
5	X_M2to Y	0.233	0.041	Significant

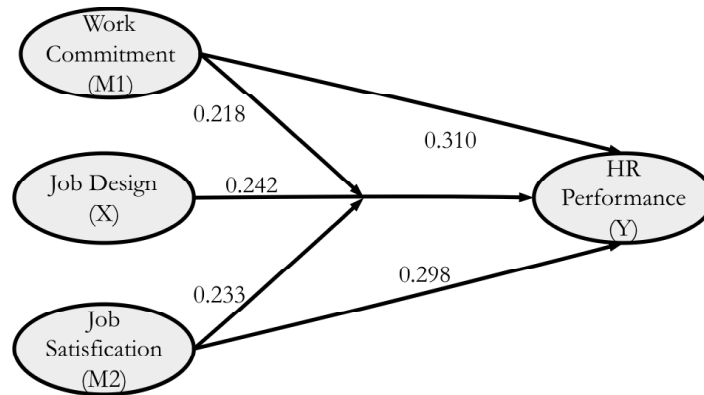


Figure 2: SEM Structural Model: Direct Effect

Based Table 2 and Figure 2, inner test result can be presented as the following models:

1. The test on the direct effect between Job Design (X) on HR Performance (Y), results in the structural coefficient value of 0.242, with a p-value of $0.024 < 0.05$, then there is a significant direct effect of Job Design (X) on HR Performance (Y). Given the structural coefficient is positive, it indicates that the relationship between both of them is positive. It means that the higher the Job Design (X), the higher the HR Performance (Y).
2. Testing the direct effect of Job Commitment (M1) on HR Performance (Y), results in the structural coefficient value of 0.310, with a p-value of 0.001. Since the p-value < 0.05 , then there is a significant direct effect of Job Commitment (M1) on HR Performance (Y). Given the structural coefficient has a positive mark, indicates that the relationship is positive. It means that, the higher the value of Job Commitment (M1), the higher the HR performance (Y).
3. Testing the direct effect of Job Satisfaction (M) on HR Performance (Y), results in the structural coefficient value of 0.298, with a p-value of 0.003. Since p-value < 0.05 , then there is a significant direct effect on Job satisfaction (M) on HR Performance (Y). Given the structural coefficient is positive, it indicates that the relationship is positive. It means that the higher the job satisfaction (M), the higher the HR performance (Y).

The Effect of Moderation of Job Commitment on The Effect of Job Design on HR Performance.

The SEM analysis results in interaction coefficient of 0.218, and P value of 0.002. Since the P value < 0.05 indicates the H2 is accepted, Job Commitment is a moderator variable between the effect of Job Design (X) on HR Performance (Y). Since the direct

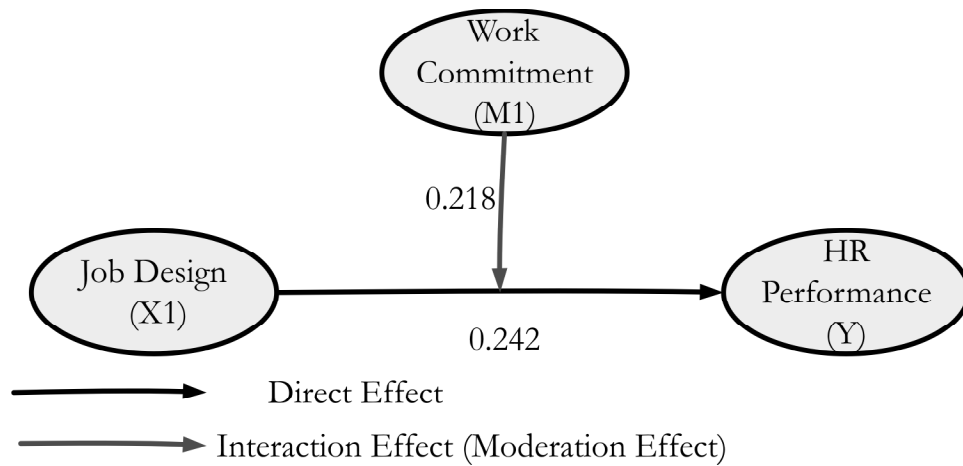


Figure 3: The Effect of Moderation of Job Commitment on the Effect of Job Design Towards the Performances of Human Resources

effect and the interactions effect have equal significant effects on HR performance (Y), the job commitment variable is the quasi moderator (false moderator). While the value of the interaction coefficient effect is marked positive, the job commitment variable (M) is strengthening. It means that the higher the value of job commitment (M), the greater the effect of Job Design (X) on HR Performance (Y).

The Effect of Moderation of Job Commitment on The Effect of Organizational Culture on HR Performance

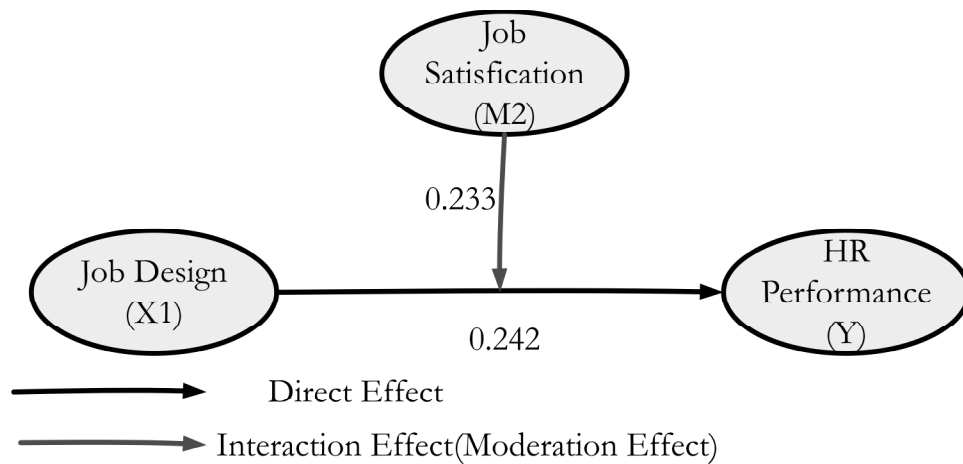


Figure 4: The Effect of Moderation of Job Commitment on The Effect of Organizational Culture on Performance of Human Resources

The SEM analysis results in interaction coefficient of 0.233, and P value of 0.041. Since the P value < 0.05 indicates the H3 is accepted. Job Satisfaction is the moderator variable between the effect of Job Design (X) on HR Performance (Y). Since the direct effect and the interactions effect have equal significant effects on HR performance (Y), the job satisfaction variable is the quasi moderator (false moderator). While the value of the interaction coefficient effect is marked positive, the job satisfaction variable (M) is strengthening. It means that, the higher the value of job satisfaction (M), the greater the effect of Design Work (X) on HR Performance (Y).

4.3. Discussion

The analysis on the hypothesis test showed that job design has a positive and significant effect on employees' job commitment. Thus, the hypothesis states that job design has a positive and significant effect on job commitments is proven. The findings of this research are in line with the findings by Steers and Porter (1983) who suggested that Individual Characteristics, Job Characteristics and working experiences are the factors that influence commitment and performance. In more specific, work experience has a dominant influence on the commitment'. The results of estimation for the dominant job design is the objective work assessment. While the dominant indicator to job commitment is work passion. Both of these indicators show a close relationship since in order to remain having a sustainable job commitment, someone should be able to maintain his/her spirit or passion as proposed by Allen and Meyer (1993).

Theoretically, the job design consists of job characteristics is in the form of various capabilities, task identity and significance lead to a meaningful experience, autonomy generates responsibility, and feedback provides knowledge for the work results. When these three psychological conditions are more visible, the employees will be more comfortable on themselves when they have good performances Hackman and Oldham (1976). The analysis on hypothesis test showed that job design does not have a significant effect on employee performance. Thus, the hypothesis states that job design has an effect on performance is not proven. The findings of this research are consistent with other studies that tried to theoretically refine and expand its model of job characteristics, combine the results and characteristics of core work and the critical psychological conditions (Johns et al., 1992; Tieg, et al., 1992; Champoux, 1992;). Welsh et al. (1993) found that the characteristics of the core work is not a cross-cultural model because it cannot improve the performance of groups of Russian factory workers. In addition to a combination of results, the balance of the job characteristics model has been demonstrated by research and goals setting. However, this model remains the most effective application technique in HR management to achieve high performance.

5. CONCLUSIONS AND RECCOMENDATIONS

Based on the analysis it can be concluded that there is a significant direct effect between variables Job design on the Human Resource performance. In addition, also found

moderating effects variable work and job satisfaction Commitment at Work Design influences on human resource performance and strengthen its quasi moderator.

There are some suggestions that recruitment system is expected to attract human resources that had been prepared previously by personnel not fixed despite recruitment system is done now is more objective through the cooperation of universities or specialized consultants. Expected employees received professional with some experience already previously. From the composition of the workforce in the company looked not meet the standard quantity proportional between field workers and administrative that are sometimes complementary to the needs of the job future expected the company provide additional skills through on the job training or training of trainers thus reducing disability and saturation of work that can be cause burnout.

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