# The Relationship Model of Work Design, Quality of Work Life on Employees Job Satisfaction (A Case Study of Surabaya Private Universities)

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Abstract: This research is a causal research, because it describes the causal relationships between the variables to answer the research question. The purpose of this research is to determine the effect of Job Design, Work Life Qualities and Job Satisfaction in Surabaya Private Universities. The sample used in this study were employees and lecturers who worked in private universities in Surabaya. The sampling technique in this study used a purposive sampling method. The analytical method used in this study is SEM-PLS with the help of the Warp-PLS software. The samples in this study were 130. The number of lecturers were 80.77% and the rest were non lecturers as many as 19.23%. 10 indicators capable of measuring job design, 13 indicators capable of measuring the quality of work life and 8 indicators capable of measuring job satisfaction. 2 indicators that are unable to measure job satisfaction are excluded from the model so that the validity and reliability criteria are met. All the hypotheses in the study are fulfilled, namely, job design variables affect the quality of work life, job design variables affect job satisfaction. Therefore, the results of the study are able to explain the diversity of the existing phenomena and can be used as general models.

Key words: Work Design, Quality of Work Life, Job Satisfaction

### I. Introduction

In the business industry, in general entrepreneur's view that business always focuses on how to get the maximum profit and reduce costs to the maximum extent possible. But over time, the paradigm shift began to develop, where the management of human resources as the main asset for business continuity really needs more attention. Even more and more companies are making innovations in managing human resources, ranging from the recruitment process, employee development, to efforts to retain potential employees. All of this is done to get qualified and highly competent workforce, have loyalty, and can provide maximum contribution to the company. With human resources who have adequate knowledge and skills, behave well, are willing to work hard, and other positive characters will greatly influence the success and progress of the company. But on the contrary, if employees do not have these things, then management will always be busy with internal problems that arise and sink and tend to disrupt the company's operations.

The problem of human resources that is currently often complained by company management is that there are still many employees who do not meet the expectations or standards set by the company, such as competencies, work ethics related to work motivation, and soft skills issues that ultimately impact on their performance. One of them was stated by Yuspratiwi (2001) that discipline can be interpreted as the attitude of a person or group who intends to follow the rules that have been set. Likewise, the work ethic problem formulated by Sinamo (2005), "the work ethic is a set of positive behaviors rooted in fundamental beliefs accompanied by total commitment to an integral work paradigm". Work ethic is the foundation of true and authentic success. Furthermore, it is said that success in various areas of life is determined by human behavior, especially work behavior. Some people refer to this work behavior as motivation, habits, and work culture.

In another point of view, it can be related that an existing situation is a result of a process or other conditions. The conditions created and in accordance with this expectation largely affect the attitudes and behaviors that arise from employees. If expectations and desires can be fulfilled, then a condition will be created where employees feel satisfaction at work. Research on job satisfaction is a concern in the industrial world, because high job satisfaction will encourage increased performance or achievement of individuals and groups, which will ultimately increase the overall effectiveness of the company. The study of job satisfaction is now a serious concern for company managers, because it is closely related to the workforce, productivity and survival of the company concerned. Low job satisfaction results in various negative impacts such as loss to follow-up, slow

work, unfulfilled work targets, strikes, employee turnovers, intentional damage and other disciplinary behavior. Conversely, high job satisfaction will greatly affect positive and dynamic work conditions that can provide tangible benefits, not only for the company but also for the employees themselves. No less important in empowering human resources in the company in order to increase employee commitment to create high job satisfaction is to involve employees in policy making and decision making. One of them is implemented into a model known as the core work characteristics that are used as the basis for redesigning a job.

The role of human resources in organizations greatly determines the direction of company life. With the low employee performance, of course, it will harm the company, causing the company goals that have been set cannot be achieved or can be achieved but do not meet expectations. The existence of the company's demands on the performance of its employees has become a major focus in recent decades. This can be seen through the productivity of employees and the company in general. The facts show that not all employees have good performance in line with expectations. In some information or data obtained, human resources play a role in determining a performance both on a small and large scale. For example, according to the 2015-2016 Global Competitiveness Index, states that Indonesia ranks 34th of all countries in the world and ranks 4th among ASEAN countries after Singapore (rank 2), Thailand (rank 31), and Malaysia (ranked 20). In this global competition, of course, human resources, in this case the labor force contributes in it. Other data states that Indonesian workers are ranked 4th in terms of productivity in the economic sector, after Singapore, Malaysia and Thailand (Rahman, 2015).

One aspect that is the source of various employee work problems is whether or not a job plan is effective. Job design as a form of development of job analysis will greatly affect the success of achieving company goals. With an effective job design will be able to align one job with another job, between one individual with another individual, and the relationship between superiors and subordinates and between employees (Zainal et al., 2009). Thus operational activities within the company become more focused on its objectives.

In addition to the problem of job design, according to several studies that have been done, the quality of work life of employees (Quality of Work Life) also shows a positive relationship on employee job satisfaction (Cherns and Davis, 1975). The QWL was first presented at the international labor relations conference in 1972 at Arden House, Columbia University, New York. According to Raja and Kumar (2013), the quality of work life is one of the trends that counts as a determinant of the sustainability and survival of business organizations. Another expert said that the quality of work life is a process carried out by organizations to respond to the needs of employees by developing mechanisms that allow them to share fully in making decisions that design their lives at work (Robbins, 2002). Making adjustments to the work needs of the worker's competencies, as well as the needs of employees to be accommodated in their competencies, will make them feel satisfaction in doing their work, so that an effort to work better appears. However, the quality of work life is not job satisfaction, but affects work satisfaction.

### II. Theoretical Framework And Hypotheses

### Job Design (JD)

Job design is a very important process in an organization, after job analysis, which produces information about the work to be done. Job design focuses on job structure, job organization, how the work is carried out and defined (Cascio, 2013: 165).

Some experts explain about job design with the following understanding. As revealed by Hackman and Oldham (1975), they identified five core work characteristics, namely:

- Variation of skills (skills variety), i.e. employees are more emphasized on the expertise needed to complete a job,
- job identity (task identity), namely employees do the work in stages according to work procedures,
- the meaning of work (task significance), i.e. work is seen as an important thing for the work of others,
- autonomy (autonomy), i.e. employees have the discretion to be able to account for the work design to the work results,
- feedback, i.e. employees get information feedback about their performance.

According to Greendberg and Baron (1995) work is designed to help employees do work happily and care about what is done, as well as being valuable and meaningful to employees in carrying out work activities. Wirawan (2015) explains that job design is integrated work content, qualifications, and rewards for each job in a way that meets the needs of employees and the organization. Freedom of action or authority, employee attachment to the products produced and services provided, as well as anything that might be an obstacle to employee productivity, are all included in the design of the job. Job design, also has an important function for staffing management in the operations of an organization. If this is done well it will motivate employees to increase company productivity and profitability.

According to Zainal, et al., (2009), job design is a process of determining the tasks to be carried out, the

methods used to carry out this task, and how the work is related to other work within the company. Job de-sign determines how the manager's work relationship with his employees, and the relationship between the employees themselves. Furthermore, it is mentioned that in the work design there are three important things that need attention, namely:

- 1. the design must reflect the fulfillment of environmental demands,
- 2. achieving maximum results and job satisfaction, and
- 3. the implementers must be able to act as feedback

By making a good and appropriate work design, it will achieve a high level of efficiency, effectiveness, productivity, and satisfaction. Job design provides a description of the scope, depth, and also the purpose of each job, which distinguishes one work from another job. Of these three things, work objectives are carried out through job analysis, in which managers describe work according to the activities required to produce results (Gibson, 1987).

Based on several descriptions of Hackman and Oldham (1975), Greendberg and Baron (1995), Wirawan (2015), Zainal, et al. (2009), and Gibson (1987) it can be concluded that job design is a basic activity for an organization in designing a job, which includes the work implementation process including the methods used, the characteristics of the work itself, the relationship with work and other work implementers, authority and responsibility that must be carried out by the executor of the work. Furthermore, the outcome of the work design is the basis for determining compensation, both financial and non-financial after the work is carried out.

### **Quality of Work Life (QWL)**

Every organization or company certainly wants the best conditions of its employees, be it competence, work performance, work productivity, and loyalty to the company. A condition where turnover is low, employees have a long period of work, employees feel comfortable, and have a strong attachment to the company indicates that the company is implementing good human resource management practices. Employees also feel that their needs for work and personal needs are met. This is an indicator where the quality of work life of employees has been met, so that employees feel job satisfaction.

Robbins (1989) defines the quality of work life as follows "A process by which organizations respond to employee needs by developing mechanisms to allow them to share fully in making the decisions that design their lives at work." Quality of work life according to Robbins is a process carried out by an organization to respond to the needs of employees by building mechanisms that allow employees to make decisions in their work.

Meanwhile Werther & Davis (1996) emphasized that the quality of work life is a good supervision, good working conditions, a decent salary, and the challenges and rewards in carrying out a job. While Lokanadha and Mohan (2010) in Wirawan (2015) said that Louis Davis had introduced the term quality of work life in the 1970s which was first discussed as the main topic at the 1972 Toronto conference. At that time the International Council for QWL was formed. Some experts have formulated the definition of quality of work life as follows.

The quality of work life in this study is defined as favorable working environment conditions for employees, so as to increase work motivation. Because the quality of work life is closely related to the pleasant atmosphere or not for employees in the work environment, then this can be associated with the problem of job satisfaction. The quality of work life itself is not job satisfaction, but as a factor influencing the level of job satisfaction. Therefore, it can be assumed that the quality of work life can also affect employee work motivation.

#### Job Satisfaction

Wexley and Yukl (2003) state that job satisfaction is a generalization of attitudes toward work. Various kinds of attitudes of a person towards his work are a reflection of pleasant or unpleasant experiences at work, as well as his expectation of the experience to be passed (Wilson, 2012: 327). If the work done by someone can please him, then he will get satisfaction. But on the contrary, dissatisfaction will be obtained if someone does not feel comfortable and happy in doing his work.

Another expert, Walker (1980: 199), states that job satisfaction will affect performance. Conversely, job dissatisfaction will become an obstacle that can hamper performance. Business is a prerequisite for achieving performance and competence is a prerequisite for achieving performance.

According to Hasibuan (2003: 203), high job satisfaction will increase the likelihood of achieving high productivity as well. Employees who are able to produce high productivity will be said to excel and have good performance, so that in essence, high job satisfaction will improve employee performance in the company. Therefore, it is very important that employees can work with happy feelings and do not feel forced, so that job satisfaction can be created in him that will support increased productivity.

In his research, Koesmono (2005) states that the meaning of job satisfaction for a worker when viewed for each word is: satisfaction is a feeling experienced by someone where what is expected has been fulfilled or even what is received exceeds what is expected, whereas work is effort someone to achieve goals by earning income

or compensation from his contribution to the place of work. Job satisfaction appears in the positive attitude of employees towards work and everything encountered in the work environment. Meanwhile a company leader has an obligation to create job satisfaction for his employees, because job satisfaction is a factor that is believed to be able to encourage and influence employee morale so that they can work well and will directly affect their performance. In addition, a manager is also required to provide a good and pleasant work atmosphere, as well as work safety guarantees so that employees will feel satisfied. At work, someone will feel comfortable and high loyalty to the company if the person gets job satisfaction in accordance with what is desired.

From some of the notions of job satisfaction put forward by these experts, it was concluded briefly that job satisfaction is an attitude that is raised by a person towards his work as a manifestation of his perceptions and feelings towards the work done. If an employee does not get job satisfaction will appear interest and enthusiasm in doing his job. Another thing that has emerged is the increase in the number of absences of employees at work. Ultimately this will affect the work productivity of these employees and also the company's performance in general. Furthermore, employees who are dissatisfied will continue to look for another place until they find a company that is able to provide job satisfaction. Job dissatisfaction is not always due to salary or material factors, but it can also be caused by other things such as facilities, security, relationships with fellow employees or leaders, and other things that are intangible.

# Job Design on Quality of Work Life

The views of the following two studies suggest that there is a significant correlation between work design and employee work life quality. Like Reddy and Reddy (2010) which revealed indications that job design has an impact on the quality of work life that is affected by the safety of the work environment, occupational health, appropriate working hours and decent income. Meanwhile, the quality of work life is also a program that represents a systems approach to work design and job enrichment that will make work more interesting and challenging. This is also a good total value in which material and non-material benefits are liked by employees as members of the organization with a view to improving working conditions and productivity (Ayodeji, 2000).

Based on the views of Reddy and Reddy (2010) and Ayodeji (2000) it can be said that job design has a positive effect on the quality of work life of employees. In other words, the better the work design is made, the more employees feel the positive impact to improve the quality of work life. Therefore, the following hypothesis can be formulated.

H1: There is an Effect of Work Design on Quality of Work Life

### Job Design on Job Satisfaction

According to Hulin and Blood (1968), job satisfaction and employee dissatisfaction with a particular job depend on a large part of the attitude of the employees. They also revealed that the relationship between job satisfaction and job characteristics would be higher in employees who have high developing needs. Hack-man and Oldham (1975) have developed an approach to job characteristics in job enrichment and found that job enrichment increases motivation and job satisfaction.

Job characteristics are known as core dimensions which produce three employees' psychological statements (Lunenburg, 2011). The third statement is producing a work result such as high internal work motivation, growth in satisfaction, job satisfaction and work effectiveness.

Based on opinions and research conducted by Hulin and Blood (1968), Hackman and Oldham. (1975), and Lunenburg (2011), it can be concluded that job design influences employee job satisfaction, with the following formula.

H2: There is the Effect of Job Design on Job Satisfaction.

### Quality of Work Life on Job Satisfaction

Quality of work life also makes work productivity better and competitive advantage, reduces employee absence and turnover, and increases job satisfaction (Barzegar et al., 2012). Another researcher, Davoodi (1998) in Asgari and Dadashi (2011), made the hypothesis that employee involvement in decision making related to work and work conditions itself would increase job satisfaction. He got the findings that employee involvement will increase job satisfaction and decrease accidents.

Gayathiri and Ramakrishnan (2013) also showed that the quality of work life affects employee job satisfaction related to work environment without stress, better motivation and satisfaction, decreased absentee-ism, lower employee turnover. Based on the opinion expressed by Barzegar et al. (2012), Davoodi (1998), Asgari and Dadashi (2011), and Gayathiri and Ramakrishnan (2013), it is concluded that there is a positive relationship between quality of work life with employee job satisfaction, which is formulated in the following hypothesis.

H3: There is an Effect of Quality of Work Life on Job Satisfaction

#### III. Research Method

This research is causal research, because it explains about the causal relationship between the variables studied to answer the research question. This type of research is also to test the hypothesis of research that has been developed based on literature review to answer the problems that have been identified previously. In this study the authors raised the job design (X1) as an independent / exogenous variable consisting of variations in work, job identity, meaning of work, autonomy, and feedback. In addition, the second independent and endogenous variable (the variable affected), namely the quality of work life (X2), which consists of career development, proper and fair compensation, communication, employee involvement, job security, and completion problem. Whereas the dependent / dependent and endogenous variable (the affected variable) is job satisfaction (Y), which consists of the level of attendance, turnover rate, work discipline, responsibility, and employee involvement. Of the three variables mentioned in the previous section, the following is an explanation of the operational definition of the variable and the indicators specified.

Table 1. Operational Definition of Research Variables

| No | Variable   | Dimension              | Operational Definition  | Indicator  |
|----|------------|------------------------|---|--|
| 1. | Job Design |                        | Job design in the form of a written document that explains the tasks, the implementation process, and expected results. Job design is described in 5 job characteristics, namely variations in skills, job identity, meaning of work, autonomy, and feedback                            |  |
|    |            | Variation of skills    | The skills needed to complete a job   | <ul><li> Variety of skills</li><li> Variety of knowledge</li></ul>   |
|    |            | Job identity           | Stages of work in accordance with work procedures that must be carried out from beginning to end  | The general form of work Order of completion of work   |
|    |            | The meaning of<br>work | Work has substantially significant<br>benefits and effects on the work of<br>others, as well as on the<br>organization's environment both<br>internally and externally  | <ul> <li>Work done is needed for other employees</li> <li>The work done is meaningful for the organization</li> </ul>  |
|    |            | Autonomy               | The freedom and independence<br>given to employees to schedule<br>and determine the procedures or<br>methods used in completing their<br>work   | <ul> <li>Freedom and independence<br/>in planning the work to be<br/>done</li> <li>Freedom of using one's own<br/>method of completing work</li> </ul>           |
|    |            | Feedback               | Information obtained by employees from superiors and colleagues about the effectiveness of the work they do   | <ul> <li>Bosses and coworkers provide information about the effectiveness of the work done</li> <li>Bosses provide direction for optimal work results</li> </ul> |
| 2  | Feedback   |                        | A condition of the work   |  |
| 2. | reeuback   |                        | environment that provides comfort<br>and pleasure for employees in<br>completing their work. Quality of<br>work life is built by sub-variables:<br>career development, proper and<br>fair compensation, communication,<br>employee involvement, work<br>facilities, and problem solving |  |
|    |            | Career<br>development  | Employees get the opportunity to increase their capacity through  | Follow education and     training according to their   |
|    |            | development            | increase their capacity through   | training according to their  |

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| 1116 |              |                   | education and training, following                          | TP10. |   |
|------|--------------|-------------------|--|-------|---|
|      |              |                   | the performance appraisal process,                         | •     | competencies Performance assessment     |
|      |              |                   | and promotion opportunities                                |       | Job promotion opportunities             |
|      |              | Adequate and      | Employees receive rewards that                             | •     | Decent benefits                         |
|      |              | fair              | are appropriate / balanced with                            |       | Fair rewards                            |
|      |              | compensation      | what they do and in accordance                             | •     | raii iewaius                            |
|      |              | compensation      | what they do and in accordance with established conditions |       |   |
|      |              | Communication     | Good communication and                                     | •     | Good communication with                 |
|      |              | Communication     | relationships with superiors and                           |       | superiors                               |
|      |              |                   | colleagues   | •     | Good communication with                 |
|      |              |                   |  |       | colleagues                              |
|      |              | Employee          | Employee involvement in the                                | •     | Involvement in decision                 |
|      |              | involvement       | decision making process related to                         |       | making                                  |
|      |              |                   | work   | •     | Has a role in providing                 |
|      |              |                   |  |       | ideas or suggestions                    |
|      |              | Work Facilities   | Equipment and work equipment                               | •     | Work facilities                         |
|      |              |                   | provided by the company to                                 | •     | Other supporting facilities             |
|      |              |                   | support work and employee welfare                          |       |   |
|      |              | Problem solving   | There is a management initiative to                        | •     | Counseling services                     |
|      |              |                   | resolve any problems and                                   | •     | Problem solving                         |
|      |              |                   | complaints raised by employees                             |       | C                                       |
|      |              |                   | related to their work or outside of                        |       |   |
|      |              |                   | work that interfere with work                              |       |   |
|      |              |                   | activities   |       |   |
|      |              |                   |  |       |   |
| 3.   | Job          |                   | An employee's psychological con-                           |       |   |
|      | satisfaction |                   | ditions expressed through attitudes                        |       |   |
|      |              |                   | and values as a result of the work                         |       |   |
|      |              |                   | done, as well as from work envi-                           |       |   |
|      |              |                   | ronment conditions that are com-                           |       |   |
|      |              | Level of          | fortable and pleasant  The level of attendance of          | •     | Employee ettendence on                  |
|      |              | attendance        | employees in the work                                      | •     | Employee attendance on                  |
|      |              | attenuance        | environment on effective days and                          |       | weekdays                                |
|      |              |                   | hours  | •     | Employee work activities                |
|      |              | Turnover rate     |  | _     | during work hours                       |
|      |              | Turnover rate     | Number of employee turnover at a certain time              | •     | The desire of employees to              |
|      |              |                   | certain time   |       | remain in the organization              |
|      |              |                   |  | •     | The desire of employees to              |
|      |              | Work discipline   | Respect and respect, and obey all                          | •     | do their jobs  Punctuality of coming to |
|      |              | 77 OIR discipline | applicable work regulations                                |       | work                                    |
|      |              |                   | application work regulations                               | •     | Obey and implement                      |
|      |              |                   |  | •     | organizational rules and                |
|      |              |                   |  |       | regulations                             |
|      |              | Responsible       | The attitude of employees who are                          | •     | Complete the work given as              |
|      |              |                   | responsible for the work and for                           |       | expected                                |
|      |              |                   | the company  | •     | Maintain and use work                   |
|      |              |                   |  |       | facilities that are used                |
|      |              |                   |  |       | properly                                |
|      |              | Employee          | The attitude of employees who are                          | •     | Employees always want to                |
|      |              | involvement       | always enthusiastic about doing                            |       | do and complete their work              |
|      |              |                   | their jobs and involved in the work                        | •     | Employees always try to be              |
|      |              |                   | team   |       | involved in work teams                  |
|      |              |                   |  |       |   |

Source: processed data

In this study the authors used primary data and secondary data. Primary data is data in the form of answers obtained directly through a questionnaire distributed to respondents. Whereas secondary data is generally in the

form of evidence, notes, or historical reports that have been arranged in an archive (documentation data) that is published and not published. Secondary data provided by this research site is the number of employees, the level of attendance and absenteeism, employee turnover, and company profile. In this study the authors used a Likert measurement scale with a scale range of 1 to 5, which shows the attitude of respondents to the statement. Sequentially from the smallest scale, the attitudes strongly disagree, disagree, neutral, agree, and strongly agree to the largest numbers. This research conducted in Surabaya, where the total sample was 130 lecturers and employees of private universities in Surabaya. The number of lecturers were 80.77% and the rest were non lecturers as many as 19.23%. Sampling was done using Purposive Random Sampling techniques. Data collection conducted by the author is by survey using questionnaires and interviews. The procedures used are (1) contacting the university where the research was conducted and conducting several interviews and discussions, (2) obtaining secondary data that has been prepared by the university, (3) distributing questionnaires to respondents who have been determined to obtain primary data, (4) respondents fill out questionnaires, (5) collect questionnaires that have been filled.

This research will use Structural Equation Modeling (SEM) data processing model to analyze data, using PLS (Partial Least Square) software. SEM is a multivariate statistical technique that is a combination of factor analysis and regression analysis (correlation), which aims to examine the relationships between variables that exist in a model, be it between indicators with their constructs or relationships between constructs. Generally, a SEM model can be divided into two main parts, namely:

#### (1) Measurement Model

This model is part of the SEM model that illustrates the relationship between latent variables and indicators. The latent variables in this study are reflexive so that the Measurement Model analysis phase is carried out in 2 stages, namely validity and reliability.

#### (2) Structural Model

Structural models describe the relationship between latent variables or between exogenous variables and latent variables. Structural Model Analysis is also called a hypothesis test, where hypothesis testing in this study uses a t test with criteria, namely, If the P value <0.05 or T count> 1.96, it can be concluded that the research hypothesis is accepted and vice versa.

### IV. Data Analysis And Discussion

This research was conducted on employees at private universities in Surabaya. The survey was conducted using google form (online questionnaire), this method was carried out in the hope that the data obtained would be collected faster and the time to do it was not bound. The research data was taken from employees of private universities in Surabaya, samples taken were 130 employees of private universities in Surabaya. The number of lecturers were 80.77% and the remaining non-lecturers as much as 19.23%. The description of the respondent's answer to the Job Design variable consists of 10 instruments as shown in Table 2.

| Instrument    |   | Respond | Total | Coomo |    |       |       |  |
|---------------|---|---------|-------|-------|----|-------|-------|--|
| Instrument —  | 1 | 2       | 3     | 4     | 5  | Total | Score |  |
| DJ1           |   | 2       | 9     | 80    | 39 | 130   | 4,20  |  |
| DJ2           |   | 1       | 14    | 81    | 34 | 130   | 4,14  |  |
| DJ3           |   | 1       | 20    | 76    | 33 | 130   | 4,08  |  |
| DJ4           | 2 | 3       | 29    | 71    | 25 | 130   | 3,88  |  |
| DJ5           | 1 | 4       | 21    | 71    | 33 | 130   | 4,01  |  |
| DJ6           |   |         | 7     | 53    | 70 | 130   | 4,48  |  |
| DJ7           | 1 | 2       | 23    | 58    | 46 | 130   | 4,12  |  |
| DJ8           | 2 | 3       | 27    | 60    | 38 | 130   | 3,99  |  |
| DJ9           | 2 | 5       | 26    | 66    | 31 | 130   | 3,92  |  |
| DJ10          | 2 | 4       | 28    | 59    | 37 | 130   | 3,96  |  |
| Average score |   |         |       |       |    |       |       |  |

Table 2. Job Design Description

Source: processed data

The highest response from respondents on the job design is in the statement "Work Done Meaningful to the Organization" (DJ6) with a score of 4.48. This shows that employees consider the work they do is very important and very meaningful for their organization. While the lowest response from respondents' assessment

of job design is in the statement "Employees Get Information on Work Completion Sequence" (DJ4) with a score of 3.88. This shows that some respondents felt there was a need for a sequence of work completion, it could be in the form of Standard Operating Procedure (SOP). Overall respondents agreed with the design work provided by the organization and that they did with an average score of 4.08. Description of respondents' answers to the variable Quality of Work Life consists of 13 instruments as in Table 3.

Table 3. Quality of Work Life Description

| In atomorphism and |   | Respon | dents' Answ | ers | -    | Total     | Score |
|--------------------|---|--------|-------------|-----|------|-----------|-------|
| Instrument —       | 1 | 2      | 3           | 4   | 5    | Total     |       |
| QWL1               | 1 | 2      | 16          | 62  | 49   | 130       | 4,20  |
| QWL2               | 4 | 2      | 30          | 60  | 34   | 130       | 3,91  |
| QWL3               | 5 | 5      | 31          | 56  | 33   | 130       | 3,82  |
| QWL4               | 4 | 9      | 40          | 49  | 28   | 130       | 3,68  |
| QWL5               | 3 | 6      | 42          | 53  | 26   | 130       | 3,72  |
| QWL6               | 3 | 4      | 23          | 63  | 37   | 130       | 3,98  |
| QWL7               | 1 |        | 12          | 63  | 54   | 130       | 4,30  |
| QWL8               | 4 | 9      | 36          | 61  | 20   | 130       | 3,65  |
| QWL9               | 3 | 5      | 32          | 62  | 28   | 130       | 3,82  |
| QWL10              | 3 | 8      | 27          | 65  | 27   | 130       | 3,81  |
| QWL11              | 4 | 8      | 33          | 60  | 25   | 130       | 3,72  |
| QWL12              | 6 | 16     | 41          | 53  | 14   | 130       | 3,41  |
| QWL13              | 4 | 9      | 35          | 60  | 22   | 130       | 3,67  |
|                    |   |        |             |     | Aver | age score | 3,82  |

Source: processed data

The highest response from respondents on the quality of work life is in the statement "Good Communication with Colleagues" (QWL7) with a score of 4.30. This shows that employees feel that good relation-ships and communication with fellow colleagues greatly affect the quality of their work. While the lowest response from the respondents' assessment of the quality of work life lies in the statement "Provided Counseling Service Facilities" (QWL12) with a score of 3.41. This shows that some respondents felt the need for counseling services, it could be in the form of intensive discussions with superiors or with psychologists to over-come boredom at work. Overall, respondents agreed with the quality of work life felt by respondents with an average score of 3.82. The description of the respondents' answers to the Job Satisfaction variable consists of 10 instruments as in Table 4.

Table 4. Job Satisfaction Description

| T44          |   | Respon | dents' Answ | vers |      | Total     | Score |
|--------------|---|--------|-------------|------|------|-----------|-------|
| Instrument — | 1 | 2      | 3           | 4    | 5    |           |       |
| JS1          |   | 2      | 13          | 50   | 65   | 130       | 4,37  |
| JS2          | 1 | 2      | 16          | 58   | 53   | 130       | 4,23  |
| JS3          | 1 | 3      | 24          | 64   | 38   | 130       | 4,04  |
| JS4          |   | 1      | 12          | 72   | 45   | 130       | 4,24  |
| JS5          |   | 4      | 14          | 56   | 56   | 130       | 4,26  |
| JS6          |   |        | 12          | 65   | 53   | 130       | 4,32  |
| JS7          |   |        | 12          | 78   | 40   | 130       | 4,22  |
| JS8          |   |        | 14          | 62   | 54   | 130       | 4,31  |
| JS9          |   |        | 12          | 61   | 57   | 130       | 4,35  |
| JS10         |   | 1      | 16          | 66   | 47   | 130       | 4,22  |
|              |   |        |             |      | Aver | age score | 4,25  |

Source: processed data

The highest response from respondents on job satisfaction is in the statement "Employee Attendance on Workdays" (JS1) with a score of 4.37. This shows that employees feel very satisfied with their work by showing their presence on weekdays in accordance with organizational requirements. While the lowest response from the respondents' assessment of job satisfaction is in the statement "Employee's Desire to Remain in the Organization" (JS3) with a score of 4.04. This shows that some respondents felt that they did not need to stay in their organization if they felt that their job satisfaction was reduced. The organization must evaluate the job satisfaction of its employees. Overall, respondents said that they strongly agreed with job satisfaction felt by respondents with an average score of 4.25.

After the data is perfectly tabulated, this research starts from the analysis of validity and reliability. In this study the direction of the indicator to the boarding is reflective, measurement model carried out by confirmatory factor analysis or often called Confirmatory Factor Analysis (CFA) which is used to test the dimensions of a construct that is to test the validity and reliability of the indicators forming the latent construct. There are three criteria to do the measurement model / to assess the outer model in SEM-PLS with the help of WarpPLS 6.0 software namely Convergent Validity, Discriminant Validity and Composite Reliability. The initial measurement of the outer model by converging validity illustrated by the loading factor value of each indicator of the variables is expected to be more than 0.4 and AVE value more than 0.5, where the construct variables in the study are work design, quality of work life and job satisfaction. The results of the outer model analysis are attached in the table as follows:

Table 5. Outer Model

| Variable | Indicator Loading Factor |        |        |        | AVE   | CA    | CR    |
|----------|--------------------------|--------|--------|--------|-------|-------|-------|
|          |                          | JD     | QWL    | JS     |       |       |       |
| JD       | JD1                      | 0.734  | -0.324 | 0.017  | 0.478 | 0.877 | 0.901 |
|          | JD2                      | 0.693  | 0.03   | 0.025  |       |       |       |
|          | JD3                      | 0.635  | 0.099  | 0.084  |       |       |       |
|          | JD4                      | 0.558  | -0.004 | 0.259  |       |       |       |
|          | JD5                      | 0.745  | 0.206  | -0.162 |       |       |       |
|          | JD6                      | 0.685  | -0.01  | 0.003  |       |       |       |
|          | JD7                      | 0.719  | -0.153 | -0.113 |       |       |       |
|          | JD8                      | 0.676  | -0.161 | 0.12   |       |       |       |
|          | JD9                      | 0.74   | 0.313  | -0.318 |       |       |       |
|          | JD10                     | 0.704  | -0.004 | 0.181  |       |       |       |
| QWL      | QWL1                     | -0.086 | 0.697  | -0.086 | 0.485 | 0.885 | 0.904 |
|          | QWL2                     | -0.061 | 0.642  | 0.048  |       |       |       |
|          | QWL3                     | -0.147 | 0.666  | 0.033  |       |       |       |
|          | QWL4                     | 0.043  | 0.667  | -0.114 |       |       |       |
|          | QWL5                     | -0.307 | 0.65   | 0.147  |       |       |       |
|          | QWL6                     | -0.207 | 0.613  | 0.006  |       |       |       |
|          | QWL7                     | 0.086  | 0.63   | -0.019 |       |       |       |
|          | QWL8                     | -0.204 | 0.633  | 0.17   |       |       |       |
|          | QWL9                     | -0.129 | 0.65   | -0.097 |       |       |       |
|          | QWL10                    | 0.32   | 0.639  | -0.383 |       |       |       |
|          | QWL11                    | 0.158  | 0.632  | -0.022 |       |       |       |
|          | QWL12                    | 0.174  | 0.604  | 0.118  |       |       |       |
|          | QWL13                    | 0.354  | 0.692  | 0.199  |       |       |       |
| JS       | JS1                      | -0.031 | 0.173  | 0.682  | 0.443 | 0.818 | 0.859 |
|          | JS2                      | 0.181  | -0.081 | 0.694  |       |       |       |
|          | JS3                      | 0.073  | 0.22   | 0.659  |       |       |       |
|          | JS4                      | -0.087 | -0.008 | 0.716  |       |       |       |

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| JS5  | 0.079  | -0.124 | 0.704 |
|------|--------|--------|-------|
| JS6  | 0.226  | -0.23  | 0.681 |
| JS7  | 0.029  | 0.063  | 0.777 |
| JS8  | -0.17  | -0.067 | 0.685 |
| JS9  | -0.489 | 0.153  | 0.244 |
| JS10 | -0.444 | 0.012  | 0.193 |

Source: processed data

The results of the outer model analysis inform that convergent validity is not fulfilled because there is a loading factor value less than 0.4 and AVE value less than 0.5. A loading factor value less than 0.4 is an indicator of job satisfaction (JS9 and JS10). An AVE value of less than 0.5 is the AVE value of the variable work design, quality of work life and job satisfaction. Furthermore, the model is modified by issuing an indicator with a loading factor value less than 0.4 and treating variables that all AVE values are less than 0.5. and all loading factor values are more than 0.4 by issuing the smallest loading factor value first until getting the AVE value more than 0.5. The results of the modification of the model are illustrated in the following table 7:

Table 7. Outer Model

| Variable | Indicator | Lo     | oading Fact |        | AVE   | CA    | CR    | R-     |
|----------|-----------|--------|-------------|--------|-------|-------|-------|--------|
|          |           | JD     | QWL         | JS     |       |       |       | Square |
| JD       | JD1       | 0.749  | -0.311      | 0.002  | 0.501 | 0.875 | 0.9   |        |
|          | JD2       | 0.711  | -0.007      | 0.002  |       |       |       |        |
|          | JD3       | 0.65   | 0.044       | 0.028  |       |       |       |        |
|          | JD5       | 0.737  | 0.269       | -0.184 |       |       |       |        |
|          | JD6       | 0.684  | -0.001      | 0.042  |       |       |       |        |
|          | JD7       | 0.719  | -0.161      | -0.012 |       |       |       |        |
|          | JD8       | 0.665  | -0.119      | 0.216  |       |       |       |        |
|          | JD9       | 0.751  | 0.269       | -0.253 |       |       |       |        |
|          | JD10      | 0.699  | 0.006       | 0.201  |       |       |       |        |
| QWL      | QWL1      | -0.011 | 0.7         | -0.088 | 0.511 | 0.878 | 0.9   | 0.632  |
|          | QWL2      | -0.094 | 0.643       | 0.044  |       |       |       |        |
|          | QWL3      | -0.163 | 0.679       | 0.078  |       |       |       |        |
|          | QWL4      | 0.039  | 0.674       | -0.078 |       |       |       |        |
|          | QWL5      | -0.291 | 0.659       | 0.172  |       |       |       |        |
|          | QWL6      | -0.16  | 0.618       | -0.068 |       |       |       |        |
|          | QWL7      | 0.087  | 0.641       | -0.065 |       |       |       |        |
|          | QWL8      | -0.21  | 0.64        | 0.182  |       |       |       |        |
|          | QWL9      | -0.051 | 0.66        | -0.147 |       |       |       |        |
|          | QWL10     | 0.369  | 0.626       | -0.346 |       |       |       |        |
|          | QWL11     | 0.129  | 0.624       | 0.034  |       |       |       |        |
|          | QWL13     | 0.356  | 0.683       | 0.263  |       |       |       |        |
| JS       | JS1       | 0.025  | 0.127       | 0.676  | 0.502 | 0.854 | 0.887 | 0.626  |
|          | JS2       | 0.136  | -0.09       | 0.699  |       |       |       |        |
|          | JS3       | 0.051  | 0.236       | 0.664  |       |       |       |        |
|          | JS4       | -0.147 | 0.029       | 0.719  |       |       |       |        |
|          | JS5       | -0.013 | -0.098      | 0.715  |       |       |       |        |
|          | JS6       | 0.108  | -0.159      | 0.689  |       |       |       |        |
|          | JS7       | 0.014  | 0.026       | 0.783  |       |       |       |        |
|          | JS8       | -0.171 | -0.06       | 0.68   |       |       |       |        |

Source: processed data

The outer model analysis based on the table above informs that convergent validity is fulfilled, this is evidenced by all the loading factor indicator values which measure the variable more than 0.4 and all the AVE values of variables more than 0.5. Discriminant validity in the outer model analysis is fulfilled, this is proved by each loading factor indicator value that measures the variable is always higher than the loading factor indicator value that measures the other variables. The reliability validity of the outer model analysis is fulfilled by showing all Cronbach Alpha and Composite Ratability values of more than 0.6. Based on the results of the outer model analysis, it can be concluded that the selected indicators can measure the variability well, this is evidenced by convergent validity, discriminant validity and validity reliability are met. Then an inner model analysis is performed to analyses the relationship between latent variables and the magnitude of the influence of exogenous variables on endogenous variables. The results of the inner model are illustrated in the table and figure as follows:

Variable relationship P Value Path Coef-Information ficient Job Design --> Quality of Work Life 0.795 < 0.001 Affected Job Design --> Job Satisfaction 0.325 < 0.001 Affected Quality of Work Life --> Job Satisfaction 0.504 < 0.001 Affected

Table 7. Inner Model

Source: processed data

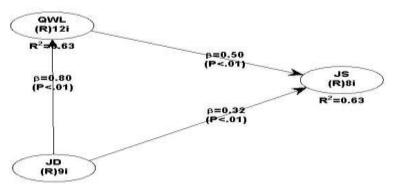


Figure 1. Structural Equation Model

Figure 1 and Table 7 inform that job design influences the quality of work life, this is indicated by the value of Pvalue <0.001. Job design affects job satisfaction, this is indicated by the value of Pvalue <0.001. Quality of work life affects work satisfaction; this is indicated by the value of Pvalue <0.001. Based on table 7, it can be concluded that all hypothesis was accepted.

### Work Design on Quality of Work Life

The results of the first hypothesis testing show that the relationship between worker design variables (JD) and quality of work life (QWL) shows a path coefficient of 0.795 with a Pvalue of <0.001, the Pvalue is less than alpha =0.05. This result means that the work design has a positive and significant relationship to the quality of work life which means it is in accordance with the first hypothesis where the better a work design, the quality of work life will increase. This means that Hypothesis 1 is accepted.

The results of hypothesis testing are supported by the views of the following two studies stating there is a significant correlation between work design and employee work life quality. Like Reddy and Reddy (2010) which revealed indications that job design has an impact on the quality of work life that is affected by the safety of the work environment, occupational health, appropriate working hours and decent income. Mean-while, the quality of work life is also a program that represents a systems approach to work design and job enrichment that will make work more interesting and challenging. This is also a good total value in which material and non-material benefits are liked by employees as members of the organization with a view to improving working conditions and productivity (Ayodeji, 2000).

### Job Design on Job Satisfaction

The results of the second hypothesis testing show that the relationship between work design variables (JD) and job satisfaction (JS) shows a path coefficient of 0.325 with a Pvalue <0.001, the Pvalue is less than alpha = 0.05. This result means that job design has a positive and significant relationship to job satisfaction, which means

it is in accordance with the second hypothesis where the better a job design, the job satisfaction increases. This means that Hypothesis 2 is accepted.

The results of hypothesis testing are supported by Hulin and Blood (1968), where job satisfaction and employee job dissatisfaction with certain jobs depend largely on the attitude of the employees. They also revealed that the relationship between job satisfaction and job characteristics would be higher in employees who have high developing needs. Hackman and Oldham (1975) have developed an approach to job characteristics in job enrichment and found that job enrichment increases motivation and job satisfaction. Job characteristics are known as core dimensions which produce three employee psychological statements (Lunen-burg, 2011). The third statement is producing a work result such as high internal work motivation, growth in satisfaction, job satisfaction and work effectiveness, such as high internal work motivation, growth in satisfaction, job satisfaction and work effectiveness.

### Quality of Work Life on Job Satisfaction

The results of the third hypothesis testing show that the relationship between work quality (QWL) and work satisfaction (JS) shows a path coefficient of 0.504 with a Pvalue of <0.001, the value of the Pvalue is less than alpha = 0.05. This result means that the quality of work life has a positive and significant relationship to job satisfaction, which means it is in accordance with the third hypothesis where the better quality of work life, the job satisfaction increases. This means that Hypothesis 3 is accepted.

Quality of work life also makes work productivity better and competitive advantage, reduces employee absence and turnover, and increases job satisfaction (Barzegar et al., 2012). Another researcher, Davoodi (1998) in Asgari and Dadashi (2011), made the hypothesis that employee involvement in decision making related to work and work conditions itself would increase job satisfaction. He got the findings that employee involvement will increase job satisfaction and decrease accidents. Gayathiri and Ramakrishnan (2013) also showed that the quality of work life affects employee job satisfaction related to work environment without stress, better motivation and satisfaction, decreased absenteeism, lower employee turnover.

### V. Conclusion, Implication, Suggestion, And Limitations

Samples of this study were 130. The number of lecturers were 80.77% and the rest were non lecturers as many as 19.23%. Indicators that can measure job design variable were 10, indicators that can measure the quality of work life variable were 13, and 8 indicators can measure job satisfaction variable. 2 indicators that are not able to measure job satisfaction are excluded from the model so that the validity and reliability criteria are met. All hypotheses in the research are fulfilled, namely the variable of work design influences the quality of work life, the variable of work design influences job satisfaction and the variable of quality of work life affects job satisfaction. Therefore, the results of the study are able to explain the diversity of the existing phenomena and can be used as general models.

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