

Job Satisfaction Scale: A Psychometric Study Kindergarten Teachers In Yogyakarta

Tri Ayuk Rama Dani, Fatwa Tentama

Abstract: The research objectives are to discover the job satisfaction validity and construct reliability and find the dimensions and indicators capability to form job satisfaction variable. The job satisfaction is measured by its work, pay, promotion, supervision, and colleagues. The research subject are 57 kindergarten teachers in Yogyakarta. The data collecting method is the job satisfaction scale. The analysis research data uses Structural Equation Modelling (SEM) SmartPLS 3.2.8 by CFA 2nd Order of reflective construct. Bases on analysis finding, the dimensions and indicators forming the job satisfaction construct is valid and reliable. Supervision as the dominant dimension reflecting the job satisfaction construction is by loading factor of 0.931. Pay as the lowest dimension reflecting the job satisfaction construct is by loading factor of 0.721. It points all dimension and indicator is able to reflect and form job satisfaction construct. Therefore, the structural model can be accepted as the theory describes the job satisfaction according to the empirical data from subject.

Keywords: 2nd Order CFA, Construct Reliability, Construct Validity, Partial Least Square, Salary, Supervision, Job Satisfaction

1. INTRODUCTION

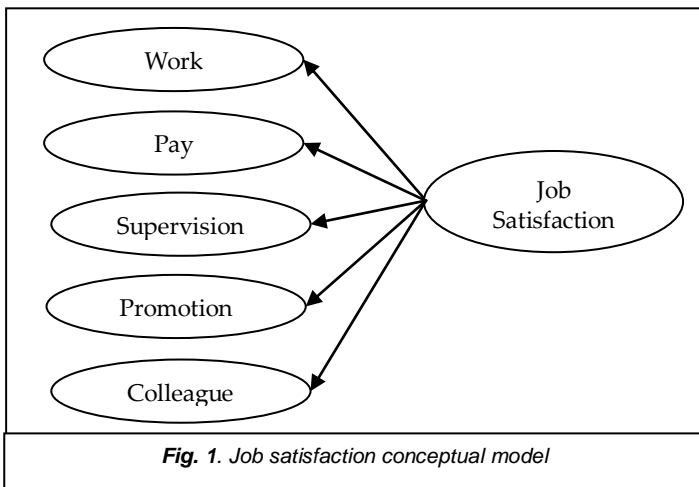
Qualified education is supported by various factors; the one of them is qualified teacher. As professionals, teacher should improve themselves based on the technology and science development. The job satisfaction will be useful for individuals where it contributes well on their works. The job satisfaction then is crucial for the employees. It is similar to Smith, Kendall, and Hullin statements [1] that job satisfaction is crucial for an employee. A teacher is the job satisfaction owned by someone in this research which it could increase the teacher quality to have good performance and be able to build good relation with students and fellow teachers [2]. Sommer and Kulkarni [3] stated the job satisfaction can be from the positive relation of employee with organisation, clear career opportunity, and respected feeling.

The job satisfaction is crucial to employee. The high job satisfaction can increase employee life quality and avoid the work stress [2], increase the employee performance [4], decrease fatigue and heart disease [5]. According to Rezvani, Chang, Wiewiora, Ashkanasy, Jordan, and Zolin [6] the job satisfaction is able to mediate the emotional intelligence and project success. For the teachers, the job satisfaction help them to memorize the material well [7], which it positively influence the students' learning result [8]. While the low job satisfaction related to the work stress [9], psychological fatigue, low self-esteem [10], and turn over intention [11]. For the teachers, the low job satisfaction damage on the low students learning development as the impact of ineffective teaching process [12]. For the school, the low teachers job satisfaction creates the frequent teacher changes, so the schools need to open the teacher recruitment and briefing repeatedly [13]. Meanwhile, the research of job satisfaction is developing. It is the effort to increase the health, happiness, subjective well-being, and job self-esteem, which are the factors potentially increasing organization performance [14]. It also minimizes the factors which decreasing the work-satisfaction such as unqualified employees, unsafe work situation, uncooperative colleague, and the supervisors who don't give and consider the decision-making process [15]. Job

satisfaction empirical study present that it influences on Organizational Citizen Behaviour (OCB) [16], performance [17], organization commitment [18], work stress [19], emotional [20]. The job satisfaction definition had developed over years by experts. Hoppok and Spielgler [21] define it as psychology device, integrated environment and physiological by the encouraging the employees to admit they are happy of their work. Next, according to Vroom [22] job satisfaction is employee's emotional orientation to their role in workplace. Locke [5] said that job satisfaction is the level of happiness, comfort, and needs fulfilment which is achieved by someone of the career choice or daily job. Robbins and Judge [23] define it as positive feeling to someone's work as the result of someone's characteristic evaluation. Smith, Kendall, and Hullin [1] stated that it is the happiness and satisfaction by the employees when they involved in work and tried to complete it. They added that job satisfaction is crucial employees manner and often learned. The job satisfaction consists of someone's feeling and manner to the work and all specific work dimension, it is bad or good, negative or positive, tends to contribute on wide and unsatisfied feeling development [24].

The three job satisfaction dimension based on Smith, Kendall and Hullin [1] are: the work, salary, supervision, promotion, and colleague. 1) Its work is the employees' tendency to prefer the jobs which give the chance to use the ability, skill, freedom and feedback to how well they work. The characteristic create the work is more challenging. Otherwise, the less challenging works form boredom but the over challenging works also form failure and frustration. 2) Pay is they employees want the fair, trusted, and as expected compensation system and promotion policy. If the salary tends to fit with the work demands, skill level and on organization standard, the employees will satisfy. 3) Supervision is the fair, open-minded, and work-willing with the lower employee superior. 4) Promotion is the clearance employees transfer plot from the position to the position has higher responsibility and its organizational level. The promotion commonly related to demand increase, skill, and responsibility. It sustains the company to take the advantage of employees' skill and ability maximally. The promotion is related to status change, for instance, from temporary employees to permanent. In general, most of the employees are happy of getting promotion. 5) Colleague is employee work partner. The colleagues fulfil the social interaction need which the humble colleague will support the individual work so the job satisfaction is increasing.

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Base on picture 1 is arranged research hypothesis as below:

H: The job satisfaction dimensions are work, pay, supervision, promotion and colleague which form job satisfaction. One of the approaches which can be used to test the construct of measure instrument is Confirmatory Factor Analysis (CFA). It is the primary approach in factor analysis. It can be used to test a construct dimensionality. The test is used to model measurement which can describe indicator and dimension of doer in reflecting latent variable is the job satisfaction by factor loading of each aspect forms a construct. CFA is also used to test construct validity and reliability from the dimensions formed the latent construct [25]. The CFA which used in this research is Second Order CFA which is the measurement model consisted of two levels. The first is analysis from the aspect latent construct to its indicators and both analyses is done from latent construct to its dimension construct [25].

Based on the explanation above, it can be concluded that the job satisfaction is important in the organization. As it is important, the research problem formulations are 1) is the job satisfaction construct valid and reliable? 2) is the work, salary, supervision, promotion, and colleague able to form the job satisfaction construct?. The objectives are to 1) test the construct validity and reliability of job satisfaction, 2) analyse dimension and indicators which could form job satisfaction variable.

2 RESEARCH METHOD

2.1 Research Participant

Participants in this study is 57 kindergarten teachers in Yogyakarta.

2.2 Research Design

The research design is semi-constructive where the scale design will be done using theoretical study collaboration by direct information from the field data. The benefits of using semi-construction design is strengthening the existed theory and reproducing behaviourism as much as it can be. Then, the testing to psychometric property included content validity analysis discrimination power, confirmatory factor analysis, and validity concurrent/external [26].

2.3 Data Collection Method

The Data collecting method of the research is the job satisfaction scale by Smith, Kendall and Hulin [1] consisted of

5 dimension are work, pay, supervision, promotion, and colleague. The scale model of the research is using differential semantic model and arranged by some of word couple statements where each word couple has moving number from 1-5 as the answers of the statements. The item statement from the aspect is on the table 1 below.

TABLE 1
THE EXAMPLE OF WORK ASPECT ITEM

When I am working, I feel.....						
Anxious	1	2	3	4	5	Calm
Afraid	1	2	3	4	5	Safe

The scale arrangement on the research is based on blue print can be seen on table 2.

TABLE 2

JOB SATISFACTION BLUE PRINT

Dimension	Behaviour Indicators	Item Numbers	Total
Work	1. Attitude towards work 2. Interest in work 3. Reaction to work	1,2,3,4,5,6	6
Pay	1. The reward received 2. Allowance based on work 3. Reward reaction	7,8,9,10,11,12	6
Supervision	1. The superior is always motivating 2. The headmaster do the assessment towards the teachers work 3. The headmaster is always paying attention to teachers' difficulty	13,14,15,16,17,18	6
Promotion	1. Teacher training 2. Job offering 3. The reaction towards the offering	19,20,21,22,23,24	6
Coworkers	1. The relation for equal work colleague 2. The relation for different work colleague 3. The relation with the headmaster	25,26,27,28,29,30	6
Total		30	30

2.4 Validity and Reliability

The research aimed to test the construct of validity and reliability of job satisfaction measure instrument by outer model test. The validity construct test is done confirmatory in order to show how well the result from the measure instrument using by referring the theory used in defining the construct. The construct validity test conducted including includes convergent validity, which refers to loading factor test value of >0.5, the average variance extracted of 0.05, and its discriminant validity conducted by comparing the AVE root where the value should be higher than the correlation between the existed dimension. The next is conducted reliability test in order to show the internal consistency of measure instrument used. This method is by to look the Composite Reliability and Cronbach's Alpha where according to Cooper, the value should be had is > 0.7 [27].

2.5 Data Analysis

The research data is analysed by program SmartPLS 3.2.8 with reflective construct through 2nd order CFA. According to Abdillah and Hartono [28], PLS is Structural Equation Modelling (SEM) variant based which simultaneously could do the model measurement test to test validity and reliability.

3 RESULT

According to the result of outer model test analysis on the job satisfaction scale which conducted by program SmartPLS 3.2.8, the result can be seen on the picture 2 below.

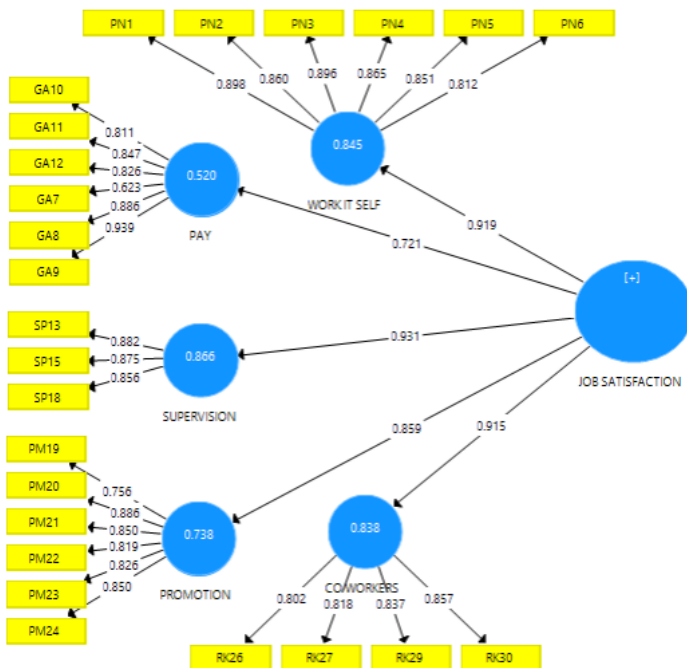


Fig. 2. The Output outer model of job satisfaction constructs

3.1.1 Convergent Validity

According to convergent validity test in outer model is found that the loading factor value of variable to dimension has the value of > 0.5 which showed on table 3.

TABLE 3
LOADING FACTOR VALUES (VARIABLE-ASPECT)

Dimension	Loading factor	Annotation
Work	0.919	Valid
Salary	0.721	Valid
Supervision	0.931	Valid
Promotion	0.859	Valid
Colleague	0.915	Valid

According to convergent validity test on outer mode is found that the loading factor from dimension to indicators has the value of > 0.5 showed on the table 4.

TABLE 4

LOADING FACTOR VALUE (DIMENSION-INDICATOR)

Dimension	Loading factor	Annotation
PN1	0.898	Valid
PN2	0.860	Valid
PN3	0.896	Valid
PN4	0.865	Valid
PN5	0.851	Valid
PN6	0.812	Valid
GA7	0.623	Valid
GA8	0.886	Valid
GA9	0.939	Valid
GA10	0.811	Valid
GA11	0.847	Valid
GA12	0.826	Valid
SP13	0.882	Valid
SP15	0.875	Valid
SP18	0.856	Valid
PM19	0.756	Valid
PM20	0.886	Valid
PM21	0.850	Valid
PM22	0.819	Valid
PM23	0.826	Valid
PM24	0.850	Valid
RK26	0.802	Valid
RK27	0.818	Valid
RK29	0.837	Valid
RK30	0.857	Valid

According to validity convergent test value shows AVE on the job satisfaction construct is 0.523 with the value of AVE on each dimension can be seen on table 5.

TABLE 5

AVERAGE VARIABLE EXTRACTED VALUE

Dimension	AVE	Annotation
Work	0.685	Valid
Pay	0.692	Valid
Supervision	0.747	Valid
Promotion	0.687	Valid

Coworker 0.758 Valid

3.1.2 Discriminant Validity

Based on discriminant validity test value is to show the root result of AVE on each dimension is higher than the AVE root on other dimension so it discriminant validity criteria is reached. The root value of Average Variance Extracted (AVE) of job satisfaction construct is on table 6.

TABLE 6

THE ROOT VALUE OF AVERAGE VARIANCE EXTRACTED (AVE) OF JOB SATISFACTION CONSTRUCT

Dimension	PN	GA	SP	PM	RK
PN	0.864	0.685	0.846	0.690	0.849
GA	0.685	0.828	0.627	0.380	0.520
SP	0.846	0.627	0.871	0.820	0.825
PM	0.690	0.380	0.820	0.832	0.819
RK	0.819	0.520	0.828	0.819	0.829

3.2 The Construct of Reliability Test

Based on the construct reliability test result which is conducted, the value of Composite Reliability and Cronbach's Alpha is >0.7 can be stated the item used of the research is reliable.

TABLE 7

COMPOSITE RELIABILITY AND CRONBACH ALPHA VALUE OF JOB SATISFACTION CONSTRUCT

Variable	Composite Reliability	Cronbach alpha	Annotation
Job satisfaction	0.965	0.962	Valid

The result of reliability construct test by Confirmatory Factor Analysis 2nd Order on table 7 shows the construct has good reliability and means that the dimension measured the job satisfaction latent construct or variable meets the unidimensional criteria [29]. It is showed by Composite Reliability value of 0,965 and Cronbach's Alpha of 0,962. The test of validity and construct reliability produce the valid and reliable items which is able to reflect the job satisfaction is a number 14, 16, 17, 25, and 28. According to the research producing and data analysis towards the construct of job satisfaction which formed by using Confirmatory Factor Analysis 2nd Order, the result shows the model is acceptable as the all dimension could reflect to the construct which is formed.

4 DISCUSSION

Based in the analysis result of validity and reliability construct then the dimension and indicators which form the job satisfaction is stated valid and reliable. It shows that all dimension and indicators is able to reflect and form the job satisfaction. The dominant dimension which is able to reflect the job satisfaction is supervision as seen in loading factor value of 0.931 where the indicators is the superior who always motivate, the headmaster do assessment towards the teachers performance, and always pays attention to the

teachers difficulty. According to the field data, the achieved result is the headmaster always evaluates the teachers difficulty and often do assessment or give the opinion to teachers' difficulties in teaching process. The lowest dimension which is able to reflect the job satisfaction is pay as it seen from loading factor value of 0.721 where the indicator is the received reward, allowance based on job, and the reward reaction and the facilities based on job. According to field data, the result is the received rewards is not as expected, sometimes is inappropriate towards the work which has done, and there is lack facilities is given by teachers. The research finding by Syauta, Troena, and Setiawan [30] proved that the job satisfaction meets the reliability requirement with Cronbach's Alpha value of 0.807. Otherwise the others research conducted by Awang, Ahmad, and Zin [31] proved the job satisfaction is met the reliability requirement with Cronbach's Alpha value of 0.951 and in this research, it has 0.962. This research shows the supervision is the most dominant for describing job satisfaction with loading factor value of 0.931. The result is getting along with Fesharaki, Talebiyan, Aghamiri, and Mohammadian [32] research which shows the supervision described the job satisfaction with loading factor of 0.913. Meanwhile on the research of Awang Ahmad, and Zin [31], the most dominant aspect described the job satisfaction is promotion aspect with loading factor value of 0.612. So, this research finding is able to present the theoretical implication in developing the measure instrument of job satisfaction and the practice of it. For the further researcher, they could test the job satisfaction related to others variable in order to expand the different research which the research finding can be generalised.

5 CONCLUSION

According to analysis and discussion finding, it can be concluded that the job satisfaction construct in this research has the good validity and reliability. The dominant aspect reflects the job satisfaction construct is supervision with the loading factor of 0.931. The lowest aspect reflects the job satisfaction construct is salary with the loading factor of 0.721. It shows all aspect and indicator is able to reflect and form the job satisfaction construct. Therefore, the structural model is acceptable because of the theory drawing the job satisfaction based on empirical data from the subject.

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