

## Leadership, quality of worklife, job satisfaction and organizational citizenship behavior in PT. Pertamina

Imam Moestain<sup>a\*</sup>, Hamidah<sup>a</sup> and Kadir<sup>a</sup>

<sup>a</sup>Universitas Negeri Jakarta, Indonesia

CHRONICLE

ABSTRACT

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Organizational citizenship behavior (OCB) is a form of positive, constructive and meaningful social behavior that helps the tasks given by the leadership become lighter if there are workers with high OCB and that the consequences will increase productivity and success which can be seen as a factor that contributes to the work of the company. This study aims to examine the leadership and quality of worklife on organizational citizenship behavior mediated by job satisfaction at PT. Pertamina (Persero). The sampling technique used by researchers is proportional random sampling. In this study, there are 359 employees working for this firm where 217 people are the employees of PT. Pertamina (Persero) MOR III Jakarta and 142 are working for MOR V Surabaya. The sample of respondents used in this study are 189 people. The procedure used in testing, data processing and model development is a structural equation model. Data are analyzed using SMART-PLS tools. The results indicate that there is a positive direct effect of leadership on job satisfaction, there is a positive direct effect of quality of worklife on job satisfaction, there is a positive influence of leadership on OCB, there is a positive direct effect of quality of worklife on OCB, there is a positive direct effect on job satisfaction on OCB, there is a positive indirect effect between leadership and OCB through job satisfaction, and there is a positive indirect effect between quality of worklife and OCB through job satisfaction.

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### 1. Introduction

The goals of any organization is normally determined by the behavior of human resources in that organization. Every employee has duties and responsibilities aimed at achieving the goals of implementing functions in the organization. Every employee in the organization is required to have organizational citizenship behavior so that the functions of the organization are run as expected and the goals that have been made can be achieved. Organizational citizenship behavior (OCB) at PT. Pertamina (Persero) MOR III Jakarta and MOR V Surabaya, is still not optimal with an indication that there are still many permanent workers who work home on time, arrive late and attendance is still low. This can be seen from employee absenteeism data in all MOR III Jakarta and Mor V Surabaya departments. There are still many absences and late work. Leadership at PT. Pertamina (Persero) MOR III Jakarta and MOR V Surabaya, seems still not well received by every employee, from the results of a brief interview of 30 employees and the results of the questionnaire we found there are still some employees who do not comply with all decisions issued by the leadership, are reluctant to pay attention to the new policies issued by the leadership and some employees have not felt the leader communicates within the company using a family approach. Quality of work life is a major problem that deserves the attention of the organization because it is considered capable of increasing employee participation in the organization. By conducting a brief interview and seeing the results of the questionnaire we realize that majority of employees at PT. Pertamina (Persero) MOR III Jakarta and MOR V Surabaya, still do not provide a comfortable workspace to carry out their duties, are not optimal in anticipating health for employees, and are lacking care about improving the completeness of the workplace.

\* Corresponding author.

E-mail address: [sekretaris@pertaminafoundation.org](mailto:sekretaris@pertaminafoundation.org) (I. Moestain)

Factors that can affect employee job satisfaction basically can be practically divided into two parts, intrinsic factors and extrinsic factors. Through a brief interview to 30 existing employees and seeing the results of a questionnaire about job satisfaction, the majority of employees of PT. Pertamina (Persero) still feel compelled to work on any work given to themselves, some still feel that company regulations are not optimal in facilitating employee needs, employees feel the company is less concerned with the work situation, and the benefits given by the company to each employee are still lacking in value and not appropriate. From the description above, it can be concluded that every company that exists really needs the support of competent human resources or workers who have a loyal attitude towards their organization so that the company's goals can be achieved. To achieve the desired level of organizational citizenship behavior, every organization must pay attention to leadership, quality of work life, and job satisfaction of each employee. Based on this phenomenon, the researcher is interested in making a dissertation entitled Leadership, Quality of Worklife, Job Satisfaction, and OCB at PT. Pertamina (Persero).

## 2. Literature review

### 2.1 Organizational Citizenship Behavior

Kinicki and Kreitner (2010) suggested that OCB is an employee behavior that exceeds work role requirements and consists of employee behavior that is beyond the call of duty. Examples include such gestures as constructive statements about the department, expressions of personal interest in the work of others, suggestions for improvement, training new people, respect for the spirit as well as the letter of house keeping rules, care of organizational property, and punctuality and attendance well beyond the standard or enforceable level. Robbins and Judge (2013) clarifies the OCB concept that when someone is in a good mood, he/she tends to be able to do more than the organization or company's duties. Thus, OCB is a behavior and attitudes that benefit the organization that cannot be grown on the basis of the obligation of formal roles or contract forms. Podsakoff et al. (2000), mentioned 7 dimensions of OCB, namely (1) helping behavior, (2) sportsmanship, (3) organizational loyalty, (4) organizational compliance, (5) individual initiative, (6) civic virtue, and (7) self-development. Meanwhile according to Kumar and Shah (2015), OCB dimensions are altruism, courtesy, civic virtue, sportsmanship, conscientiousness. OCB has seven dimensions as follows: First the nature of helping, someone who has a good OCB will like to help others even though there is no appreciation for it. Both sportsmanlike attitudes, individuals who are said to have good OCB, will have a sporty nature such as not complaining when treated unfavorably by their colleagues and still doing their jobs well. It could also be that the individual will sacrifice his/her personal desires for the sake of his/her work. Third, loyalty or loyalty, with a good OCB, a person will have a high level of loyalty, for example an individual will remain loyal to his/her organization even though the organization is experiencing difficult conditions. Fourth adherence to the organization, Individuals will comply even with very strict organizational regulations. The five individual initiatives, individuals will have more initiative, for example someone will ask if he/she does not understand his/her work, or another example is someone will do his/her work and not wait to be instructed first. Sixth civic virtue / citizenship, this dimension relates to citizenship in which the individual will be more responsive to the things that are done by the government, so he/she will inform about the changes that occur and inform the organization. Seventh self-development, voluntary actions that can improve abilities, skills and knowledge. Based on the description above it can be synthesized that OCB is a form of employee behavior that has a voluntary willingness to carry out tasks, obligations and is not a forced action and various other things that are needed outside of these duties and obligations in order to provide more effort in promoting the interests of the company to achieve its objectives in accordance with the scope of PT.Pertamina (Persero) MOR Jakarta and Surabaya are seen in indicators: 1) altruism (caring), 2) civic virtue (virtue), 3) conscientiousness (sincerity), 4) courtesy (courtesy) , 5. sportsmanship, (sportsmanship).

### 2.2 Leadership

Colquitt et al. (2015) define leadership as follows: "leadership is the use of power and influence to direct the activities of followers toward goal achievement". According to George and Jones (2012) leadership is defined as "leadership as the exercise of influence by one member of a group or organization over other members to help the group or organization achieve its goals". According to Robbins and Timothy (2014) transformational leadership consists of two combined words, namely, leadership which has meaning as someone who directs and coordinates who must be able to turn an idea into reality or change a concept into real action. Robbins and Timothy (2014) proposed 4 indicators of transformational leadership known as the concept of "4I" which suggest to transformational leaders to be able to garner trust, respect and admiration from their followers as for the indicators of transformational leadership as follows:

1. Idealized influence, the leader must be a good example, which can be followed by his employees, so that it will produce respect and trust in the leader.
2. Inspirational motivation, leaders must be able to provide motivation, and clear targets to be achieved by their employees.
3. Intellectual stimulation, leaders must be able to stimulate their employees to come up with new ideas and ideas, leaders must also let their employees become problem solvers and provide new innovations under their guidance.
4. Individualized consideration, leaders must pay attention, listen to complaints, and understand the needs of their employees.

All of these dimensions, if implemented properly, will help in maximizing the role of leaders in the company. From some of the opinions above it can be synthesized that leadership is a kind of leadership that is able to guide and encourage subordinates

to believe in themselves, understand the abilities, have high motivation and be able to complete duties properly and produce high performance and work performance to encourage achievement of organizational goals, with indicators: 1). ideal influence (idealized influence), 2). inspirational motivation (inspirational motivation), 3). intellectual simulation (intellectual simulation), 4) individual consideration (individualized consideration).

### 2.3 Quality of Worklife

According to Griffin and Moorhead (2014), “the quality of work life (QWL) is the extent to which workers can satisfy the important needs of people despite their experience in the organization”. In line with what Bateman and Thomas (2007) pointed out, the general purpose of the quality of work life is to meet employee’s needs, therefore QWL has eight categories, namely: 1) the remuneration is appropriate and adequate, 2) a safe and healthy environment, 3) work to develop human capabilities, 4) the opportunity for growth and personal security, 5) the social environment that shapes personal identity, freedom of suspicion, 6) constitutionalism, or the right to privacy, and the process of mutual disagreements, 7) the role of and, 8) the organization acts socially responsible. According to Erdem (2014) there was no general consensus that could be agreed upon. Erdem (2014) developed several QWL indicators, namely: total area of life, safe and healthy work conditions, improving the work capacity, social integration, democratic environment, fair and appropriate compensation. Total area of life, safe and healthy working conditions, increased work capacity, social integration, democratic environment, fair and appropriate compensation. Based on a theoretical study of the quality of work life, it can be synthesized that the quality of work life is the perception that employees have of a situation which is based on the fulfillment of the degree of conformity of welfare expected by employees ideally related to their works. If employees feel the quality of work life in the company both will have a positive impact in efforts to achieve company goals. Measurement of quality of work life, with indicators: 1). total area of work life, 2). safe and healthy work conditions, 3). improving the workplace capacity, 4) social integration, 5). democratic environment, 6). fair and appropriate compensation.

### 2.4 Job Satisfaction

According to Robbins and Judge (2013) “Job satisfaction is a positive feeling about a job resulting from an evaluation of its characteristics is clearly broad”. The impact of satisfied and dissatisfied shows in one theoretical model-the exit-voice-loyalty-neglect framework-is helpful in understanding the consequences of dissatisfactions. The framework four responses, which differ along two dimensions: constructive / destructive and active / passive. According to Colquitt et al (2015) “Job satisfaction is defined as a pleasurable emotional state resulting from the appraisal of one's job or job experience”. According to James et al. (2012), “Job satisfaction is an attitude that individuals have about their Jobs. It results from their perceptions of their jobs, based on factors of the work environment, such as the supervisor style, policies and procedures, work group affiliations, working conditions, and fringe benefits”. James et al. (2012) indicate a satisfaction work is: 1) The supervisor style, 2). Policies and procedures, 3). Work group affiliation, 4). Working conditions, 5). fringe benefits. Based on the definition of the concepts that have been described can be synthesized work satisfaction is the employee's perception of feelings of pleasure and displeasure and how well their work can provide things that are considered important about their work based on work environment factors, with indicators: 1). The supervisor style, 2). Policies and procedures, 3). Work group affiliation, 4). Working conditions, 5). fringe benefits.

## 3. Method

In this study the research method used is a quantitative approach through survey methods. Analysis of the data used is to use the method of structural equation modeling, using SMART-PLS statistical computation tools. The way to collect the data needed in this study was carried out through questionnaires, interviews and tests that had been prepared in advance. This study will examine the relationship between variables and measure the influence of each variable with each other, while the variables to be examined, namely: leadership (X1), quality of worklife (X2), job satisfaction (X3) and organizational citizenship behavior. The following is a research instrument grid and the relationship between the research variables can be described in the research constellation as follows:

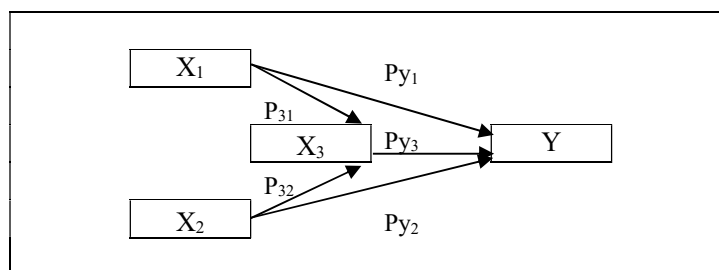


Fig. 1. The proposed method

Based on the descriptions in the conceptual description, relevant research results and theoretical framework, the following research hypotheses can be formulated:

1. Leadership (leadership) has a positive effect on organizational citizenship behavior.
2. Quality of work life (quality of work life) has a positive effect on organizational citizenship behavior.
3. Job satisfaction has a positive effect on organizational citizenship behavior.
4. Leadership (leadership) has a positive effect on employee satisfaction.
5. Quality of work life (quality of work life) has a positive effect on employee satisfaction.
6. Leadership (leadership) influences organizational citizenship behavior mediated by job satisfaction.
7. Quality of work life influences organizational citizenship behavior mediated by job satisfaction.

Population is a generalization area consisting of objects or subjects that have certain quantities or characteristics determined by researchers to be studied and then draw conclusions. Affordable population in this study are permanent workers who work at the head office of PT. Pertamina (Persero) MOR III Jakarta numbering: 217 people and PT. Pertamina (Persero) MOR V Surabaya numbered 142 people, with a total of 359 people. The target variable studied is organizational citizenship behavior (OCB) permanent workers who work at the headquarters of PT. Pertamina (Persero) Marketing Operation Region (MOR) III Jakarta and PT. Pertamina (Persero) Marketing Operation Region (MOR) V Surabaya. The number of samples is determined using the formula Taro Yamane or Slovin in Riadi (2018), as follows:

$$n = \frac{N}{N \cdot d^2 + 1}, \quad (1)$$

where  $n$ ,  $N$  are sample size and population number, respectively. In addition,  $d$  is the precision set, which is 0.05 when the level of confidence is 95%. In our study we have,  $359/(359 \times 0.05^2 + 1) = 189$ . Based on Eq. (1) with an error rate of 5% of the population, then the sample taken amounted to 189 people, with details of 114 people MOR III Jakarta and 75 people MOR V Surabaya. The sampling technique uses proportional random sampling technique. This technique is chosen based on the consideration that members of the population have the same opportunity to be chosen.

#### 4. The results

In a study conducted, researchers distributed 189 questionnaires to employees of PT. Pertamina (Pesrero) MOR III Jakarta and MOR V Surabaya. The profiles of respondents in this study are differed by age, gender, job experience and educational background. Fig. 1 shows the results of the profile of PT. Pertamina (Pesero) MOR III Jakarta and MOR V Surabaya:

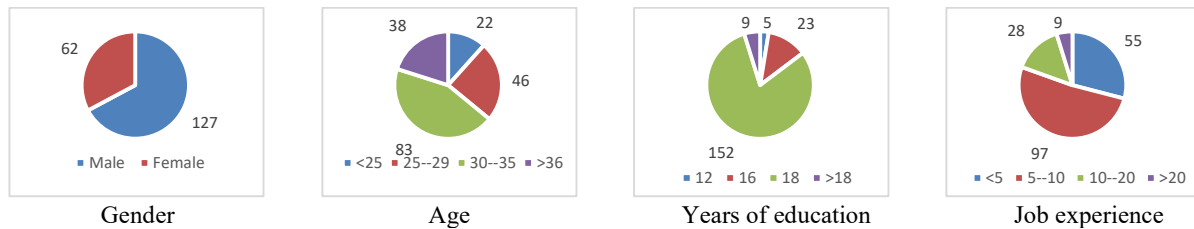


Fig. 2. Personal characteristics of the participants

According to Fig. 1, it can be explained that there were more respondents were male, namely 127 people with a percentage of 60.19%, while 62 respondents were female with a percentage of 32.80%. Also, it was found that respondents with age  $\leq 25$  years amounted to 22 people with a percentage of 11.64%, respondents with ages 25-29 years totaling 46 people with a percentage of 24.33%, respondents with ages 30-35 years totaling 83 people with a percentage of 43.91%, and respondents with age  $\geq 36$  years amounted to 38 people with a percentage of 20.10%.

##### 4.1 Organizational Citizenship Behavior (Y)

The variable score of OCB (Y) was obtained from 189 respondents by filling out a questionnaire which totaled 35 statements. The summary of descriptive data for the OCB (Y) variable is shown in Table 1. The variable score for organizational citizenship behavior was obtained from 189 respondents by filling out a questionnaire of 35 statements. The scoring is done by using a Likert scale for each statement item. Based on the calculation data summarized in Table 1 the highest score (maximum) was 175 and the lowest score (minimum) was 94, the average score was 135, the score that often appears (mode) was 149, the middle score (median) was 137, the standard deviation (standard deviation) was 19.18 and variance was 367.83. By using the Sturgess rule, the number of interval classes is 9 and the length of the interval is 10 so that a list of frequency distributions of organizational citizenship behavior scores can be made as shown in Table 2 as follows.

Table 1

Summary Description of Variable Data Organizational Citizenship Behavior (Y)

No.	Description	Score	No.	Description	Score	No.	Description	Score
1	Number of respondents	189	6	Range of scores	81	11	Median	137
2	Number of statement	35	7	Interval Amount	9	12	Variance	367,83
3	Number of Variable	25,541	8	Class Intervals	10	13	Standard deviation	19,18
4	Highest score	175	9	Average score	135			
5	Lowest score	94	10	Mode	149			

**Table 2**  
Frequency Distribution of Organizational Citizenship Behavior (Y) Score

No.	Class Intervals			Limit		Frequency		
				Lower	Upper	Absolute	Relatively(%)	Cumulative (%)
1	94	-	103	93.5	103.5	10	5.29	5.29
2	104	-	113	103.5	113.5	22	11.64	16.93
3	114	-	123	113.5	123.5	18	9.52	26.46
4	124	-	133	123.5	133.5	29	15.34	41.80
5	134	-	143	133.5	143.5	47	24.87	66.67
6	144	-	153	143.5	153.5	34	17.99	84.66
7	154	-	163	153.5	163.5	15	7.94	92.59
8	164	-	173	163.5	173.5	12	6.35	98.94
9	174	-	183	173.5	183.5	2	1.06	100.00
						189	100%	

#### 4.2 Leadership (X1)

The leadership variable score (X1) was obtained from 189 respondents by filling out questionnaires totaling 28 statements. The summary of descriptive data for the leadership variable (X1) is shown in Table 3 as follows,

**Table 3**  
Summary of Data Description of Leadership Variables (X1)

No.	Description	Score	No.	Description	Score	No.	Description	Score
1	Number of respondents	189	6	Range of scores	56	11	Median	111
2	Number of statement	28	7	Interval Amount	9	12	Variance	201.17
3	Number of Variable	21.025	8	Class Intervals	7	13	Standard deviation	14.18
4	Highest score	140	9	Average score	111.24			
5	Lowest score	84	10	Mode	124			

The leadership variable score was obtained from 189 respondents by filling out a questionnaire of 28 statements. Scoring is done by using a Likert scale for each statement item. Based on the calculation data summarized in Table 3 the highest score (maximum) was 140 and the lowest score (minimum) was 84, the average score was 111.24, the score that often appears (mode) was 124, the middle score (median) was 111, the standard deviation (standard deviation) was 14.18 and the variance was 201.17. Using the Sturges rule, the number of interval classes was 9 and the length of the interval was 7 so that a frequency distribution list of leadership scores can be made as in Table 4 as follows,

**Table 4**  
Leadership Score Frequency Distribution (X1)

No.	Class Intervals			Limit		Frequency		
				Under	On	Absolute	Relatively(%)	Cumulative (%)
1	84	-	90	83.5	90.5	18	9.52	9.52
2	91	-	97	90.5	97.5	16	8.47	17.99
3	98	-	104	97.5	104.5	26	13.76	31.75
4	105	-	111	104.5	111.5	38	20.11	51.85
5	112	-	118	111.5	118.5	30	15.87	67.72
6	119	-	125	118.5	125.5	31	16.40	84.13
7	126	-	132	125.5	132.5	11	5.82	89.95
8	133	-	139	132.5	139.5	17	8.99	98.94
9	140	-	146	139.5	146.5	2	1.06	100.00
						189	100%	

#### 4.3 Quality of Work Life (X2)

The variable score of quality of work life (X2) was obtained from 189 respondents by filling out a questionnaire totaling 42 statements. The summary of descriptive data for the variable quality of work life (X2) as shown in Table 5:

**Table 5**  
Summary of Quality of Work Life (X2) Variable Data Description

No.	Description	Score	No.	Description	Score	No.	Description	Score
1	Number of respondents	189	6	Range of scores	94	11	Median	169
2	Number of statement	42	7	Interval Amount	9	12	Variance	600.78
3	Number of Variable	30.838	8	Class Intervals	11	13	Standard deviation	24.51
4	Highest score	210	9	Average score	163			
5	Lowest score	116	10	Mode	185			

Quality of work life variable scores were obtained from 189 respondents by completing a questionnaire of 42 statements. Scoring is done by using a Likert scale for each statement item. Based on the calculation data summarized in Table 5 the highest score (maximum) was 210 and the lowest score (minimum) was 116, the average score was 163, the score that often

appears (mode) was 185, the middle score (median) was 169, the standard deviation (standard deviation) was 24.5 and variance was 600.78. By using the Sturges rule, the number of interval classes is 9 and the length of the interval is 11 so that a frequency distribution list of quality of work life scores can be made as shown in Table 6:

**Table 6**  
Frequency Distribution of Quality of Work Life Scores (X2)

No.	Class Intervals		Limit		Frequency			
			Lower	Upper	Absolute	Relatively(%)	Cumulative (%)	
1	116	- 126	115.5	126.5	19	10.05	10.05	
2	127	- 137	126.5	137.5	22	11.64	21.69	
3	138	- 148	137.5	148.5	18	9.52	31.22	
4	149	- 159	148.5	159.5	14	7.41	38.62	
5	160	- 170	159.5	170.5	30	15.87	54.50	
6	171	- 181	170.5	181.5	23	12.17	66.67	
7	182	- 192	181.5	192.5	49	25.93	92.59	
8	193	- 203	192.5	203.5	9	4.76	97.35	
9	204	- 214	203.5	214.5	5	2.65	100.00	
					<b>189</b>	<b>100%</b>		

#### 4.4 Job Satisfaction (X3)

Job satisfaction variable score (X3) is obtained from 189 respondents by filling out a questionnaire totaling 34 statements. The summary of descriptive data for the job satisfaction variable (X3) is shown in Table 7 as follows,

**Table 7**  
Summary of Job Satisfaction Variable Data Description (X3)

No.	Description	Score	No.	Description	Score
1	Number of respondents	189	8	Class Intervals	8
2	Number of statement items	34	9	Average score	126
3	Number of Variable Scores	23,819	10	Mode	130
4	Highest score	170	11	Median	121
5	Lowest score	99	12	Variance	353.97
6	Range of scores	71	13	Standard deviation	18.81
7	Interval Amount	9			

Job satisfaction variable scores were obtained from 189 respondents by filling out a questionnaire totaling 34 statement items. Scoring is performed by using a Likert scale for each statement item. Based on the calculation data summarized in Table 7, the highest score (maximum) is 170 and the lowest score (minimum) is 99, the average score is 126, the score that often appears (mode) is 130, the middle score (median) is 121, the standard deviation (standard deviation) is 18.81 and the variance is 353.97. Using the Sturges rule, the number of interval classes is 9 and the length of the interval is 8 so that a frequency distribution list of job satisfaction scores can be made as in Table 8. In processing data, researchers used linear regression techniques that were tested with Partial Least Square (PLS) using SmartPLS software version 3.2.8.

**Table 8**  
Frequency Distribution of Job Satisfaction Scores (X3)

No.	Class Intervals		Limit		Frequency			
			Lower	Upper	Absolute	Relatively(%)	Cumulative (%)	
1	99	- 106	98.5	106.5	38	20.11	20.11	
2	107	- 114	106.5	114.5	24	12.70	32.80	
3	115	- 122	114.5	122.5	36	19.05	51.85	
4	123	- 130	122.5	130.5	16	8.47	60.32	
5	131	- 138	130.5	138.5	12	6.35	66.67	
6	139	- 146	138.5	146.5	36	19.05	85.71	
7	147	- 154	146.5	154.5	13	6.88	92.59	
8	155	- 162	154.5	162.5	7	3.70	96.30	
9	163	- 170	162.5	170.5	7	3.70	100.00	
					<b>189</b>	<b>100%</b>		

#### 4.5 Evaluate the Outer Model

The goodness of fit test for the outer model in PLS consists of three tests, namely convergent validity, discriminant validity, and composite reliability testing.

##### 4.5.1 Convergent Validity

The convergent validity value is the factorial loading value of the latent variable with its indicators. In the PLS model, meeting the convergence validity value can be said to be valid if the loading value is 0.5 - 0.6. Convergent validity explains the ability

of each indicator to explain the research variables studied. To find out whether or not latent indicators are valid, we look at the loading factor values. Variable indicator must be greater than 0.5. Table 9 demonstrates the results.

**Table 9****Outer Loading Calculation Matrix**

Item	Outer Loading Minimum	Outer Loading Results	Information	Item	Outer Loading Minimum	Outer Loading Results	Information
Organizational Citizenship Behavior (Y)				Leadership (X1)			
1	0.5	0.793	Valid	1	0.5	0.667	Valid
2	0.5	0.869	Valid	2	0.5	0.648	Valid
3	0.5	0.823	Valid	3	0.5	0.695	Valid
4	0.5	0.657	Valid	4	0.5	0.652	Valid
5	0.5	0.684	Valid	5	0.5	0.736	Valid
6	0.5	0.755	Valid	6	0.5	0.815	Valid
7	0.5	0.801	Valid	7	0.5	0.738	Valid
8	0.5	0.669	Valid	8	0.5	0.837	Valid
9	0.5	0.787	Valid	9	0.5	0.783	Valid
10	0.5	0.693	Valid	10	0.5	0.79	Valid
11	0.5	0.631	Valid	11	0.5	0.666	Valid
12	0.5	0.663	Valid				
Quality of Work Life (X2)				Job Satisfaction (X3)			
1	0.5	0.681	Valid	1	0.5	0.625	Valid
2	0.5	0.724	Valid	2	0.5	0.764	Valid
3	0.5	0.736	Valid	3	0.5	0.809	Valid
4	0.5	0.747	Valid	4	0.5	0.651	Valid
5	0.5	0.845	Valid	5	0.5	0.842	Valid
6	0.5	0.787	Valid	6	0.5	0.717	Valid
7	0.5	0.61	Valid	7	0.5	0.665	Valid
8	0.5	0.791	Valid	8	0.5	0.747	Valid
9	0.5	0.722	Valid	9	0.5	0.603	Valid
10	0.5	0.75	Valid	10	0.5	0.653	Valid
11	0.5	0.681	Valid	11	0.5	0.731	Valid
12	0.5	0.648	Valid				
13	0.5	0.727	Valid				
14	0.5	0.637	Valid				
15	0.5	0.677	Valid				

Table 9 shows that all indicators are declared valid because it has a loading factor value above 0.5. The biggest loading factor value for variable organizational citizenship behavior lies in indicator number 3 with a value of 0.861 while the lowest value lies in indicator number 1 with a value of 0.542. In the leadership variable the highest loading factor value lies in indicator number 10 with a value of 0.830. while the lowest value lies in indicator number 4 with a value of 0.602. In the variable quality of work life, the highest value of loading factor lies in indicator number 5 with a value of 0.842. while the lowest value lies in indicator number 7 with a value of 0.585. In the job satisfaction, the highest loading factor value is indicator number 6 with a value of 0.828. while the lowest value lies in indicator number 1 with a value of 0.614.

#### 4.5.2 Discriminant Validity Test

Discriminant validity test needs to be done to see the validity of indicators in measuring latent variables. An indicator is declared valid if it has the highest loading factor to the intended construct compared to the loading factor of the correlation of other latent indicators. Table 10 shows the results of cross loadings matrix for discriminating validity. The results of Table 10 indicate that there are no indicators that can predict variables other than the variables themselves. This can be seen from the highest loading factor of each indicator in the variable column to be measured. Thus, latent variables predict indicators in their blocks better than indicators in other blocks.

Another method for assessing discriminant validity is to look at the Average Variance Extracted (AVE) value, the value suggested as an initial research according to Riadi (2018) is above 0.5. Table 1 shows the AVE values in this study.

**Table 10**

## Cross Loading Calculation Matrix

	OCB (Y)	Leadership (X1)	Quality Of Work Life (X2)	Job Satisfaction (X3)		OCB (Y)	Leadership (X1)	Quality Of Work Life (X2)	Job Satisfaction (X3)
OCB1	0.793	0.603	0.407	0.488	QWL3	0.442	0.334	0.736	0.508
OCB2	0.869	0.682	0.538	0.616	QWL4	0.308	0.34	0.747	0.428
OCB3	0.823	0.591	0.484	0.518	QWL5	0.336	0.276	0.845	0.477
OCB4	0.657	0.542	0.241	0.47	QWL6	0.492	0.392	0.787	0.54
OCB5	0.684	0.561	0.436	0.409	QWL7	0.263	0.089	0.61	0.366
OCB6	0.755	0.589	0.379	0.42	QWL8	0.213	0.362	0.791	0.527
OCB7	0.801	0.63	0.417	0.528	QWL9	0.334	0.39	0.722	0.508
OCB8	0.669	0.593	0.397	0.526	QWL10	0.34	0.33	0.75	0.472
OCB9	0.787	0.678	0.46	0.583	QWL11	0.276	0.442	0.681	0.371
OCB10	0.693	0.58	0.42	0.58	QWL12	0.392	0.308	0.648	0.479
OCB11	0.631	0.582	0.448	0.586	QWL13	0.089	0.336	0.727	0.56
OCB12	0.663	0.604	0.415	0.512	QWL14	0.362	0.492	0.637	0.491
LD1	0.61	0.667	0.382	0.486	QWL15	0.39	0.263	0.677	0.331
LD2	0.564	0.648	0.403	0.453	JS1	0.255	0.249	0.424	0.625
LD3	0.641	0.695	0.396	0.532	JS2	0.573	0.572	0.441	0.764
LD4	0.617	0.652	0.451	0.474	JS3	0.59	0.544	0.45	0.809
LD5	0.525	0.736	0.16	0.427	JS4	0.384	0.373	0.402	0.651
LD6	0.662	0.815	0.366	0.476	JS5	0.705	0.631	0.626	0.842
LD7	0.569	0.738	0.202	0.429	JS6	0.562	0.578	0.375	0.717
LD8	0.675	0.837	0.38	0.552	JS7	0.44	0.456	0.365	0.665
LD9	0.58	0.783	0.266	0.478	JS8	0.545	0.473	0.458	0.747
LD10	0.672	0.79	0.451	0.621	JS9	0.361	0.329	0.525	0.603
LD11	0.399	0.666	0.108	0.36	JS10	0.337	0.321	0.541	0.653
QWL1	0.105	0.105	0.681	0.283	JS11	0.592	0.518	0.406	0.731
QWL2	0.33	0.213	0.724	0.32					

**Table 11**

## Average Variance Extracted (AVE) Matrix

Variable	Average Variance Extracted (AVE)	
Organizational Citizenship Behavior (Y)	0.546	
Leadership (X1)	0.537	Valid
Quality of Work Life (X2)	0.519	Valid
Job Satisfaction (X3)	0.509	Valid

According to the results of Table 11, it can be seen that all variables have AVE values exceeding 0.5 which can be interpreted that all variables are valid.

### 5. Composite Reliability

Reliability test on the outer model can be measured by two criteria, namely composite reliability or Cronbach alpha of the indicator block that measures the construct. The construct is declared reliable if the composite reliability value is above 0.70. These values can be seen in the table and diagram below:

**Table 12**

## Composite Reliability Matrix

Variable	Composite Reliability	Information
Organizational Citizenship Behavior (Y)	0.935	Valid
Leadership (X1)	0.927	Valid
Quality of Work Life (X2)	0.941	Valid
Job Satisfaction (X3)	0.919	Valid

Based on Table 12, it can be seen that the composite reliability value of all latent variables is obtained above 0.7 which can be interpreted that all variables in this study meet the requirements and are reliable.

### 6. Hypothesis Testing

The statistical test conducted in this study was by a significance level of 5% and the decision criteria for  $H_0$  is rejected if the p-value  $\leq 5\%$  or t statistic  $>$  table (1.96). Table 13 shows the results of path coefficients and t test:

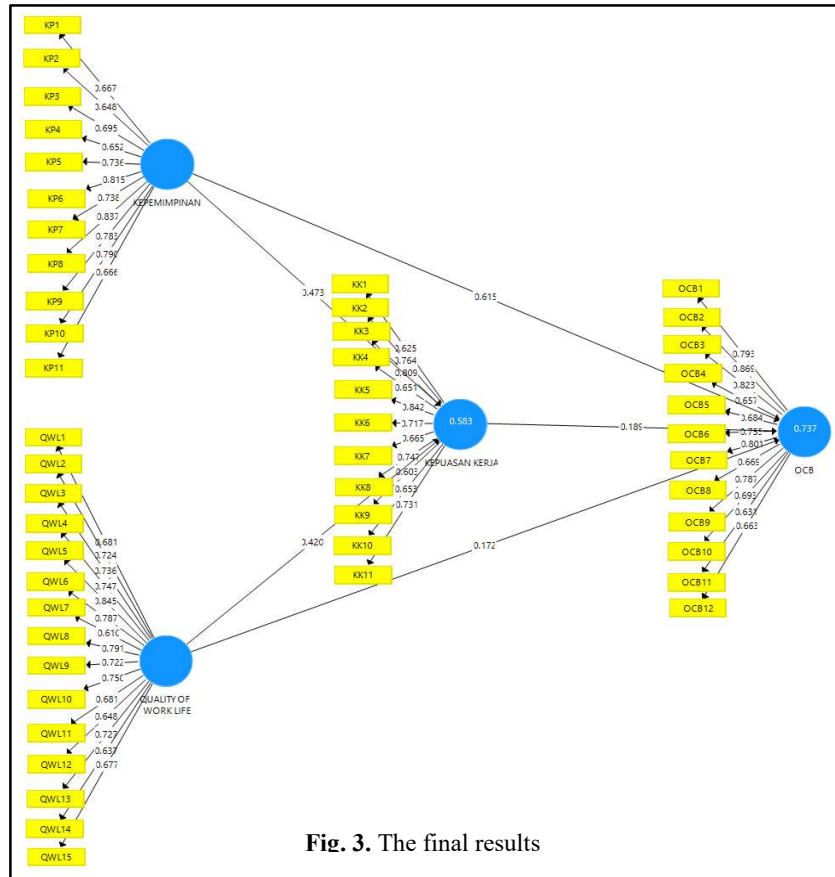


**Table 13**  
Path coefficient matrix and T test (Direct Effects)

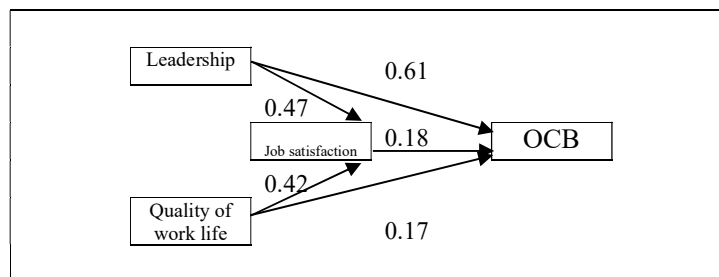
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	Sig.
LD (X1) → OCB (Y)	0.615	0.62	0.063	9.747	0.000
QWL (X2) → OCB (Y)	0.172	0.172	0.051	3.356	0.001
JS (X3) → OCB (Y)	0.189	0.185	0.08	2.355	0.019
LD (X1) → JS (X3)	0.473	0.471	0.048	9.820	0.000
QWL (X2) → JS (X3)	0.42	0.426	0.047	8.859	0.000

**Table 14**  
The results of Indirect Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	Sig.
KP (X1) → KK (X3) → OCB (Y)	0.09	0.086	0.036	2.469	0.014
QWL (X2) → KK (X3) → OCB (Y)	0.08	0.08	0.038	2.068	0.039



**Fig. 3.** The final results



**Fig. 4.** The summary of the structural model

The results of the structural model analysis in Fig. 3 and Fig. 4 produce estimates of causal relationships between variables in the form of t-values and path coefficient values. The explanation is described as follows:

**Table 15**  
Causal Relations Between Variables

No	Path	Path coefficient	t-value	t-table	Significance	Conclusion
1	Leadership → OCB	0,615	9,747	1,96	Significant	There is sufficient evidence that leadership has a positive effect on OCB
2	Quality of work life → OCB	0,172	3,356	1,96	Significant	There is sufficient evidence that quality of work life has a positive effect on OCB
3	Job satisfaction → OCB	0,189	2,355	1,96	Significant	There is sufficient evidence that job satisfaction has a positive effect on OCB
4	Leadership → Job satisfaction	0,473	9,820	1,96	Significant	There is sufficient evidence that leadership has a positive effect on job satisfaction
5	Quality of work life → Job satisfaction	0,420	8,859	1,96	Significant	There is sufficient evidence that quality of work life has a positive effect on job satisfaction
6	Leadership → Job satisfaction → OCB	0,090	2,469	1,96	Significant	There is sufficient evidence that leadership has an indirectly positive effect on OCB through job satisfaction
7	Quality of work life → Job satisfaction → OCB	0,080	2,068	1,96	Significant	There is sufficient evidence that quality of work life has an indirect positive effect on OCB through job satisfaction

## 7. Discussion

### 7.1 Effect of leadership on organization citizenship behavior

The influence of leadership on organizational citizenship behavior is positive at 0.612 and significant at  $9.051 > 1.96$ . Thus, it can be concluded that leadership has a direct positive effect on organizational citizenship behavior by 61.2%. This explains the value of construct reliability (composite reliability matrix) and matrix average variance extracted leadership variable (X1) and organizational citizenship behavior (Y), where the value of construct reliability (matrix composite reliability) leadership is  $0.927 > 0.70$  and it can be concluded to be significant and for the value Average variance of extracted leadership is  $0.518 > 0.50$  and it can be concluded significant. While the value of construct reliability (composite reliability matrix) organizational citizenship behavior is equal to  $0.932 > 0.70$  and it can be concluded significant and for the average variance extracted leadership value is  $0.518 > 0.50$  and it can be concluded significant. The results of this study reinforce the theory put forward by Yang and Wei (2018) which shows that leadership ethics significantly influences OCB. Further research by Meri Prasetyawati (2015) reveals that leadership style was positively and significantly correlated with OCB. While Kartini's research (2017) shows that there is a positive and significant influence of leadership style on OCB.

### 7.2 Effect of quality of work life on organizational citizenship behavior

The influence of quality of work life on organizational citizenship behavior is positive at 0.176 and significant at  $3.439 > 1.96$ . It can be concluded that quality of work life has a direct positive effect on organizational citizenship behavior at 17.6%. The value of construct reliability (composite reliability matrix) and average variance matrix extracted variable quality of work life (X2) and organizational citizenship behavior (Y), where the value of construct reliability (matrix composite reliability) quality of work life is worth  $0.942 > 0.70$ , it can be concluded significant and for the average variance extracted quality of work life value of  $0.507 > 0.50$  it can be concluded significant. While the value of construct reliability (composite reliability matrix) organizational citizenship behavior is worth  $0.932 > 0.70$  it can be concluded significant and for the average variance extracted quality of work life value is  $0.507 > 0.50$  it can be concluded significant. The results of this study reinforce the theory put forward by Ghasemi et al. (2016) which shows there is a direct and significant relationship between quality of work life and organizational citizenship behavior (OCB). Subsequent research by Marlinda (2017) shows that there is a very significant positive relationship between the quality of work life and organizational citizenship behavior (OCB). While research by Amalia et al. (2014) shows that of the 9 components of quality of work life there is only 1 variable that is able to influence the level of OCB employees through job satisfaction, namely career development.

### 7.3 Effect of job satisfaction on organizational citizenship behavior

The effect of job satisfaction on organizational citizenship behavior is positive at 0.181 and significant at  $2.245 > 1.96$ . Thus, it can be concluded that the quality of work life has a direct positive effect on organizational citizenship behavior by 18.1%. The value of construct reliability (composite reliability matrix) and average variance matrix extracted variable job satisfaction (X3) and organizational citizenship behavior (Y), where the value of construct reliability (composite reliability matrix) job satisfaction is worth  $0.919 > 0.70$  then it can be concluded significant and for the value average variance extracted job satisfaction is  $0.511 > 0.50$  so it can be concluded significant. While the value of construct reliability (composite reliability matrix) organizational citizenship behavior is worth  $0.932 > 0.70$  it can be concluded significant and for the average variance extracted value of job satisfaction is  $0.511 > 0.50$  it can be concluded significant. The results of this study reinforce the theory put forward by Swaminathan & Jawahar (2013) showing that there is a positive and significant relationship between employee satisfaction with OCB. Furthermore, Prasetyo et al. (2015) conducted a research at PLN West Java Indonesia and Banten distribution offices and the results of the job satisfaction research had a significant effect on organizational citizenship behavior (OCB). Subsequent research by Dewi and Suwandana (2016) conducted research on Aget Jaya Hotel employees showing job satisfaction has a positive and significant effect on organizational citizenship behavior (OCB).

#### 7.4 Effect of leadership on job satisfaction

The influence of leadership on positive job satisfaction is 0.465 and significant is  $9.219 > 1.96$ . Thus, it can be concluded that leadership has a direct positive effect on job satisfaction by 46.5%. The value of construct reliability (composite reliability matrix) and average variance extracted matrix of leadership variables (X1) and job satisfaction (X2), where the value of construct reliability (composite reliability matrix) of leadership is  $0.927 > 0.70$ , it can be concluded significant and for the average variance extracted value leadership value of  $0.518 > 0.50$ , it can be concluded significant. While the value of construct reliability (composite reliability matrix) job satisfaction is  $0.919 > 0.70$ , it can be concluded that it is significant and for the average variance extracted leadership value is  $0.518 > 0.50$  and it can be concluded significant. The results of this study reinforce the theory put forward by Widodo (2014) showing that leadership has a significant and positive effect on job satisfaction. Furthermore Budiman (2017) in his research found that leadership has a significant effect on job satisfaction. Subsequent research by Susilowati (2014).

#### 7.5 The effect of quality of work life on job satisfaction

The influence of quality of work life on positive job satisfaction is 0.413 and significant is  $9.370 > 1.96$ . Thus, it can be concluded that the quality of work life has a direct positive effect on job satisfaction by 41.3%. The construct reliability value (composite reliability matrix) and the average variance matrix extracted variable quality of work life (X2) and job satisfaction (X3), where the value of construct reliability (matrix composite reliability) quality of work life is worth  $0.942 > 0.70$  so it can be concluded significant and for the average variance extracted quality of work life is worth  $0.507 > 0.50$  so it can be concluded significant. While the value of construct reliability (composite reliability matrix) job satisfaction is worth  $0.919 > 0.70$ , it can be concluded that significant and for the average variance extracted quality of work life value is  $0.507 > 0.50$ , it can be concluded significant. The results of this study reinforce the theory put forward by Anbari et al (2014). The results of the study indicate the quality of work life has a significant effect on job satisfaction. Furthermore, Soni and Rawal (2014) found a significant influence on the quality of work life on employee satisfaction. Next Omega (2015), also reports that QWL has a significant effect on employee satisfaction.

#### 7.6 The influence of leadership on organizational citizenship behavior mediated by job satisfaction

The influence of leadership on organizational citizenship behavior mediated by job satisfaction is positive with a value of 0.084 and significant at  $2.301 > 1.96$ . Thus, it can be concluded that leadership has an indirect effect on organizational citizenship behavior mediated by job satisfaction by 8.4%. The results of this study reinforce the theory put forward by Juniarta (2016) in his research found that the influence of transformational leadership on OCB is indirect, mediated by job satisfaction.

#### 7.7. The effect of quality of work life on organizational citizenship behavior mediated by job satisfaction

The influence of quality of work life on organizational citizenship behavior mediated by positive job satisfaction is 0.075 and significant is  $1.988 > 1.96$ . Thus, it can be concluded that leadership has an indirect effect on organizational citizenship behavior mediated by job satisfaction by 7.5%. The results of this study reinforce the theory put forward by Oktaviani and Rijanti (2015).

### 8. Conclusion

From the results of the evaluation and discussion described, the following research conclusions are obtained: leadership has a direct positive effect on job satisfaction. Leadership has a direct positive effect on organizational citizenship behavior. Quality of worklife has a direct positive effect on job satisfaction. Quality of worklife has a direct positive effect on organizational citizenship behavior. Leadership has no direct positive effect on organizational citizenship behavior through quality of worklife. Quality of worklife has an indirect positive effect on organizational citizenship behavior through quality of work-life.

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