

Psychological Capital and Quality of Work Life Increase the Employee Performance of Laboratory Animal Division

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Abstract: The Laboratory Animal Division holds the first key in the vaccine safety. Over the past 5 years, the division performance has declined, as the result most of the sections sometimes could not reach the target due to the lack of employee expertise which was caused by unequal career development programs. This inequality was triggered by education levels owned by the employees which has affected the level of their confidence to increase the work ability. This condition is called Psychological Capital and Quality of Work Life. In this regard, the division needs to consider the capabilities of its resources through the aspects of PsyCap and QWL. The aim of this research is to measure the level of PsyCap and QWL, also to analyze whether PsyCap and QWL has a positive and significant effect on the employee performance. Data were collected through the questionnaires to 96 employees and processed using Multiple Linear Regression Analysis with "IBM SPSS Statistics Version 20.0" program. The result showed that the level of PsyCap is high (79.68%), while the level of QWL is average (71.70%) and the level of performance is relatively high (84.79%). This research concludes that the PsyCap and QWL has a positive and significant influence on performance. This research suggests the division to make PsyCap and QWL as the considerations in the policy making process. The management must involve the employees in the decision-making meetings and establishing the quality improvement team.

1 INTRODUCTION

Indonesia's economic development is supported by State-Owned Enterprises (SOEs). The Laboratory Animal Division is part of the SOEs that plays a key role in testing the immunogenicity of vaccines in animals prior to the Clinical Trial on humans. This division has five sub-divisions, all have the initial keys in the vaccine testing and safety processes, so it becomes very important for the company to pay good attention to the HR performance for the sake of on-time delivery materials according to the specifications and targeted time of researches.

Problems arose within the last 5 years when the performances of most subdivisions declined and sometimes did not reach the specified targets due to the lack of employee expertise as a result of unequal career development programs. Table 1 below shows the training participants index followed by personnel of the Laboratory Animal Division during the period of 2012-2016.

Table 1: Training followed by the employees of laboratory animal division 2012 – 2016.

Position	Training Participants					Total
	2012	2013	2014	2015	2016	
Head of Division	6	8	1	-	-	15
Head of Sub Division	8	9	10	11	2	40
Section Chief	7	8	1	8	3	27
Executant	3	6	3	3	1	16
Staff	-	1	2	2	1	6
Junior Staff	1	-	-	1	-	2
Total Training	25	32	17	25	7	106

This inequality is caused by the variety of educational levels owned by the employees of Laboratory Animal Division, in which the educational background also becomes the consideration in assessing whether or not an employee to be included in the trainings held by the

division. Highly educated employees are often considered more potential and productive than the low-educated ones.

Table 2: Employee education level data of the laboratory animal division.

Position	Education						Total
	<i>S D</i>	<i>S M P</i>	<i>SMA/ SMK/ SNAK MA</i>	<i>D3</i>	<i>S1</i>	<i>S2</i>	
Head of Division	-	-	-	-	-	1	1
Head of Sub Div.		-	-	-	3	2	5
Section Chief		-	-	3	4	-	7
Senior Executant	-	-	-	-	1	-	1
Executant	-	3	50	1	-	-	54
Staff	6	2	11	-	3	-	22
Junior Staff	3	-	-	3	-	-	6
Total	9	5	61	7	11	3	96

Head of Laboratory Animal Division argued that the levels of formal education owned by the employees affect their psychological levels in terms of Self Efficacy to increase the ability of work. Employees with low levels of education usually feel marginalized and ultimately do not have confidence in their abilities, while those with higher education are increasingly encouraged to demonstrate their abilities.

Such condition is what then called Psychological Capital. Psychological Capital or abbreviated as PsyCap leads to how an organization can achieve goals through the utilization and development of the existing psychological components. While Quality of Work Life becomes a component which results in a more humane working environment and manages to meet all the needs of the organization. Inequality in the implementation of trainings indicates the poor quality of work life provided by the Laboratory Animal Division. In fact, training is a vehicle to motivate employees to develop their talents and abilities for a better performance.

Based on the above phenomenon, the observation is focused on the attention of the Laboratory Animal Division to find out how large the capacity of PsyCap and QWL of their employees because Psychological Capital is an important dimension that proved to have a significant effect on employee performance (Luthans, Youssef and Avolio, 2007). Moreover, although recent studies (May and Lau, 1999) have analyzed the relationship between Quality of Work Life and firm performance, very little work has been undertaken to identify PsyCap and QWL as a whole.

This present study attempts to cover these gaps in the research.

Considering the importance of the role and work environment of the Laboratory Animal Division, it also important for the division management to make PsyCap and QWL as the considerations in policy making. This opinion is reinforced by the statement of Luthans (2006) which reveals that the components of Psychological Capital and Quality of Work Life of each individual will continue to develop, so it is advisable for the organization to learn how to improve these components in order to be able to compete more superiorly

2 LITERATURE REVIEW

2.1 Performance

Gibson (2012) pointed out that "job performance is the outcomes of jobs that relate to the purpose of the organization such as quality, efficiency, and other criteria of effectiveness". Performance is generally built by two main dimensions of task performance and contextual performance. Colquit, LePine, and Wesson (2009) defined task performance as "employee behaviors that are involved in the transformation of organizational resources into the goods or services that the organization produces", while the contextual performance refers to how an employee is willing to engage voluntarily in informal activities, insist on achieving a task, help or cooperate with others, obey the organizational rules, and also support or maintain the organizational goals (Chen, 2009).

Cormick and Tiffin (2002) argues about three factors that can affect the performance, first of all is individual factors such as physical traits, personality, age, gender, education level, and work experience. The second is situational factors, such as the working methods and conditions of the equipment. The last is social and organizations factors, including the company policy, type of training, and the system of wages and allowances. These arguments lead to the conclusion that this present study uses personality and social organizations factors to measure PsyCap and QWL of the employees.

2.2 Psychological Capital

This study uses the definitions of Luthans, Youssef, and Avolio (2007), in which Psychological Capital is defined as a development of a positive psychological state in individuals with the characteristics: (1) having

the confidence to select and make the efforts required to succeed on challenging tasks (self-efficacy); (2) making positive attributions of current and future success (optimism); (3) being diligent in achieving goals and when it is necessary, diverting ways to achieve goals in order to succeed (hope), and (4) when in troubles, the individuals can survive and rise again even beyond their original state to succeed (resilience).

The characteristics which build Psychological Capital affect each other, so this construct is better measured as a whole (Luthans, Youssef and Avolio, 2007). Therefore, the present research uses the effectiveness of Psychological Capital as a whole, including self efficacy, optimism, hope, and resiliency.

2.3 Quality of Work Life

Cascio (2006) stated that, "quality of work life in terms of employee perceptions is their physical and mental well-being of work" or it can be interpreted as the employee's perception of their mental and physical well-being in the workplace. Cascio (2006) stated that the quality of work life consists of communication, conflict resolution, career development, employee participation, pride, equitable compensation, save environment, job security, and wellness.

For the purposes of the present study, the above definitions of QWL permit the primary purpose of QWL measurement is to enhance the productivity of employees by the things that firm possesses, such as career development, employee participation, equitable compensation, and save environment.

3 HYPHOTHESES DEVELOPMENT

The above arguments become the model of the present study, as shown in Fig.1, and the model leads to the formation of hypotheses, as follows:

H1: Psychological Capital has a positive and significant effect on employee performance.

H2: Quality of Work Life has a positive and significant effect on employee performance.

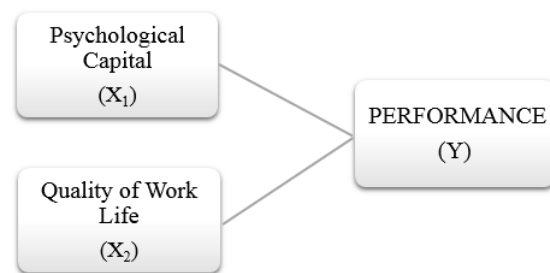


Figure 1: Research model and hypotheses.

4 METHODOLOGY

The samples of this study were equivalent to the population, consisting of 96 employees working in Laboratory Animal Division. This study used survey questionnaires sent directly to the respondents. The response rate was 100%.

The questionnaire was separated into four sections for demographic data, PsyCap, QWL, and performance. The employee's PsyCap was measured by the questionnaire originally developed by Luthans (2007) and consisted of 16 questions. The measurements on QWL were adapted from Cascio (2006) and had 12 questions. The job performance was measured using task performance and contextual performance with 8 questions. A total of 36 items referring to the 6-point Likert scale, ranging from 1-Strongly Disagree to 6-Strongly Agree.

This questionnaire was validated by pearson product moment (r) and reliability test using cronbach's alpha (α) statistic test. Multiple Regression was employed in the data analysis, using "IBM SPSS Statistic Version 20.0".

5 EMPIRICAL RESULTS

Table 3 summarizes descriptive statistics, in which the majority of the respondents are men as many as 91 people, while female respondents are only 5 people. Most respondents are in the age group of 20 to 29 years old, educated high school or vocational high school, and have worked for over 16 years.

Table 3: Respondents profile.

	Category	Frequency	%
Gender	Male	91	94.79%
	Female	5	5.21%
Age	20-29 years	30	31.25%
	30-39 years	21	21.88%
	40-49 years	27	28.12%
	> 50 years	18	18.75%
Education	Elementary School	9	9.38%
	Junior High School	5	5.21%
	Senior High School	61	63.54%
	Diploma	7	7.29%
	Degree Bachelor Degree	11	11.46%
	Degree Magister Degree	3	3.12%
	Working Experience	> 5 years	21
	6-10 years	19	19.79%
	11-15 years	19	19.79%
	> 16 years	37	38.54%

Based on the results of descriptive analysis, it is known that the level of Psychological Capital owned by the Laboratory Animal Division employees is high, with an average percentage value of 79.68%. By having a high Psychological Capital, it means that the employees have good positive psychological capacities to provide better performance in order to achieve success. The level of the employees' Quality of Work Life is quite high (medium), with an average percentage of 71.70%. Having a quite high QWL means the employees feel that the company's efforts to respond to their needs are sufficient, but the efforts do not run effectively as they should, thereby there are still employees who have not fully perceived the quality of life in their work. While in terms of performance, the employees of the Laboratory Animal Division has a relatively high level of performance with an average percentage of 84.79%. By having such a high performance, it means that the Laboratory Animal Division employees have high personal responsibilities, dare to take risks, and have comprehensive work plans to realize the goal.

Table 4: Descriptive analysis variables.

Variables	Actual Score	Ideal Score	%	Category
PsyCap	7343	9216	79.68	High
QWL	4956	6912	71.70	Quite High
Performance	3907	4608	84.79	High

Hypothesis testing in this research was done using multiple linear regression technique. The following table delineates the results of multiple linear regression calculations obtained with the help of "IBM SPSS Statistic Version 20.0" program.

Table 5: Descriptive analysis variables.

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	12.311	4.772		2.580	.011
PsychologicalCapital	.228	.048	.456	4.697	.000
QualityOfWorkLife	.181	.087	.202	2.079	.040

a. Dependent Variable: Kinerja

The hypothesis test using t test has obtained that the value of t_{count} for the variable of Psychological Capital (X_1) is 4.697 ($4.697 > t_{table} 1.989$) with the significance value of 0.000 which is smaller than 0.05 ($0.000 < 0.05$). This means the study hypothesis of H_1 stating that there is a positive and significant influence between Psychological Capital and the employee performance of the Laboratory Animal Division has been proven. This result also indicates that any 1% increase in Psychological Capital will raise the performance value by 22.8% ($\beta = 0.228$). The higher the Psychological Capital owned by the employees, the higher their performance will be.

Meanwhile, the hypothesis test on the variable of Quality of Work Life (X_2) has generated the value of t_{count} equal to 2.079 ($2.079 > t_{table} 1.989$) with the significance value of 0.040 which is also smaller than 0.05 ($0.040 < 0.05$). This indicates that the research hypothesis of H_2 stating that there is a positive and significant influence between Quality of Work Life and the performance of Laboratory Animal Division employees has been proven. This result also shows that any 1% increase in Quality of Work Life will raise the performance value by 18.1%. The higher the QWL the employees have, the higher their performance will be.

6 DISCUSSION

The results showed that Psychological Capital has a positive and significant influence between the employee performance of the Laboratory Animal Division. Psychological Capital is a positive mood that will increase the frequency of someone's work and show the spontaneous behaviour of pro social (Jex and Britt, 2008). This result supports the findings of recent research (Luthans, Avolio, Walumbwa and

Li, 2005) that Psychological Capital of employees have a significant effect on the performance. This result is also in line with the research by Choi Yongduk and Lee Dongseop (2014), where in their research stated that Psychological Capital has a positive effect on performance, turnover intention, as well as the happiness and well-being work.

Furthermore, results demonstrate that there is a positive and significant relationship between Quality of Work Life and employee performance of the Laboratory Animal Division. Our findings confirm the existing empirical literature. Shahbazi et al. (2011) found that Quality of Work Life has a positive effect on performance. This result also in accordance with previous research by Huro'ng (2016), where it is stated that Quality of Work Life has positive and significant effect on employee performance in Ho Chi Minh Public Organization. Thus, the QWL is an important factor that should be considered because it helps employees to meet their needs and help the company in realizing the goals of the organization effectively and efficiently (Nanjundeswaraswamy, 2013)

Finally, the empirical results offer support for the increasing of the Quality of Work Life. Having a medium QWL means the employees of the Laboratory Animal Division feel the efforts of the company do not run effectively as they should, thereby there are still employees who have not fully perceived the career development in their work. Researchers such as Cascio (2006) suggest that career development can be done by conducting education and training, performance evaluation, and promotion. Employees whose performance is just average or below average usually not become an ultimate choice for the leadership of the organization. Therefore, career development is always associated with a person's performance. If the employee has good performance then they have a chance for the development of their career.

7 CONCLUSIONS AND MANAGERIAL IMPLICATIONS

This present study concluded that the level of Psychological Capital owned by the employees of Laboratory Animal Division is high with an average percentage of 79.68%, while the level of Quality of Work is quite high with an average percentage of 71.70%. The analysis also stated that the Psychological Capital has a positive and significant

effect on the performance of Laboratory Animal Division employees, similarly with the Quality of Work Life variable. Broadly, this research offers several implications for the managerial: (1) the results of the research can be taken into consideration or discussion material in the policy making process; (2) to increase the Self Efficacy of the employees can be done by involving them in decision-making meetings so that they have braveness to take risks and make choices; (3) to improve Career Development of the employees can be done by providing opportunities for all employees to participate in the trainings or courses which support work fairly and equitably.

REFERENCES

- Cascio. 2006. *Managing Human Resources*, Mc Graw-Hill. Colorado.
- Chen, Y. F. 2009. Job Stress and Performance: A Study of Police Officers in Central Taiwan, *Journal Social Behavior and Personality*. 37(10).
- Choi, Y., Lee, D. 2014. Psychological Capital, Big Five Traits, and Employee Outcomes. In *Journal of Managerial Psychology*. *Emerald insight journal database*. 29(2), 122-140.
- Colquitt, J. A., Lepine, J. A., Wesson, M. J. 2009. *Organizational Behavior Improving Performance and Commitment in The Workplace*, McGraw-Hill. New York.
- Cormick, E. J., Tiffin. 2002. *Human Resource Management*, Prentice Hall. Singapore.
- Gibson, J. L. 2012. *Organization: Behaviour, Structure, Processes*, McGraw-Hill Companies, Inc. New York, 14th edition.
- Huro'ng, T. H. T. 2016. *Psychological Capital and Quality of Work Life among Employees in Public Sector: Evidence from Ho Chi Minh City Department of Culture and Sports*. Thesis. In *International School of Business, University of Economics*. NOT PUBLISHED.
- Jex, M. S., Britt, W. T. 2008. *Organizational Psychology: A Scientist practitioner Approach*, John Wiley and Sons, Inc. New Jersey, 2nd edition.
- Luthans, F., Avolio, B., Walumbwa, F., Li, W. 2005. The Psychological Capital of Chinese Workers: Exploring the Relationship with Performance, *Management and Organization Review*. 1, 247-269.
- Luthans, F. 2006. *Organizational Behavior*, McGrawHill Companies, Inc. New York, 7th edition.
- Luthans, F., Youssef, C. M., Avolio, B. J. 2007. *Psychological Capital: Developing the Human Competitive Edge*, Oxford University Press. New York.
- May, B. E., Lau, R. S. 1999. A Longitudinal Study of Quality of Work Life and Business Performance, *South Dakota Review*. 58/2, 3-7.
- Nanjundeswaraswamy, S. 2013. Quality of Work Life of Employees in Private Technical Institutions. In

International Journal for Quality Research. ISSN
1800-6450, 7(3) 3–14.

Shahbazi, S. S. H. et al. 2011. Workload and Performance
of Employees. In *Interdisciplinary Journal of
Contemporary Research in Business*. Vol 3, No. 5.

