Impact of job stress on job performance of health worker with work life balance as mediating variable

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ABSTRACT
The role of health professionals in a country is important to maintain health care society. The needs of health worker significantly increase in-line with the demand of the society towards improving quality of health. Increasing number of patients from day to day demands jobs for health worker also to be increase. That condition will be affecting the job stress level and the work life balance of the health worker which in turn affects their job performance. This research is using the quantitative method, to test hypothesis by using statistical methods. Data analysis technique in this research using the Structural Equation Model (SEM) by using software Smart PLS 3.0. In this research job stress and work life balance found to significantly affect job performance of health workers, and job stress found to significantly affect work life balance. This research also found the mediation effect of work life balance on the correlation from job stress on job performance.

INTRODUCTION
The role of health professionals in a country is important to maintain health care society. The needs of health worker significantly increase in-line with the demand of the society towards improving quality of health. Health worker job demand is also increase due to COVID 19 pandemic situation. Since the COVID 19 hit Indonesia in March 2020, the number of COVID 19 positive case is reach the number of 2.256.852 per 6 July 2021 (CNN Indonesia).

The case of COVID 19 in Indonesia including the case in the level of Province, in West Sumatra itself the number of COVID 19 by 3 July 2021 have reached the number of 52.691 Positive Case and it is an accumulates from every Districts and City in West Sumatera Province. One of the Districts that have been affected by COVID 19 in West Sumatera is Kabupaten Lima Puluh Kota, Kabupaten Lima Puluh Kota consists of thirteen subdistric and twenty two Public Health Center (CSSEGI, 2021).

Health sector service for Public Health Center Facility cannot be held online or virtually like in the educational sector, and other sectors. Increasing number of patients from day to day demands jobs for health worker also to be increase. That condition will be affecting the job stress level and the work life balance of the health worker which in turn affects their job performance (Vijayan, 2017).

The purpose of this research is; 1) to exam impact of job stress on job performance of health worker in Public Health Center at Kabupaten Lima Puluh Kota, 2) to exam impact of work life balance on job performance of health worker in Public Health Center at Kabupaten Lima Puluh Kota, 3) to exam impact of job stress on work life balance of health worker in Public Health Center at Kabupaten Lima Puluh Kota, and 4) to exam impact of job stress on job performance of health worker in Public Health Center at Kabupaten Lima Puluh Kota as it mediated by work life balance.

The hypothesis of this research is consist of for hypothesis; 1) Job stress significantly affects job performance, 2) Work life balance significantly affects job performance, 3) Job stress significantly affects work life balance, and 4) Job stress on job performance significantly mediated by work life balance. For the better understanding it can be shown in the theoretical framework of this research.
There are many issues that affect the employee’s job performance, by the research of Hassan et al. (2020) the factors such as job stress, job satisfaction, mental health extremely affect performance of the employee’s, it’s lead into the condition of unable to think better and lost interest on work. This condition is started from the state of exhaustion, poor ability of self-evaluation, and weak self-esteem of the employee’s. Those situation can negatively affect the job performance of the employee’s.

Zeb et al. (2020) define job performance as a specific behavior that is under the individual control that is aims to reach several of specific objectives. The job performance also appears to be an important factor for human resource management and organizational outcomes. The job performance also require to always be on the high level to be able to support the performance of the organization as a whole (Fogaça et al., 2018).

Bjaalid et al. (2019) indicate some factor that have been used for their research, the indicator is consist self-assessment that the employees done to asset their personal job performance, the quantity of employee work, the quality of employee work, and the ability of the employees to solving their problem at work. Those indicator is using to measure the job performance of the employees.

Organizations always trying to find the main factors that responsible for decline of employee’s performance and institutions performance. Job stress mostly comes from unwanted events and unfair decisions. The employees whose experiencing job burnout and stress on a broader scale are expected to show lower effort and performance compared with those who are less exposed to work stress problems (Idris et al., 2020).

Organizations attempt to create and formulated the strategies that are effective to satisfied their employee in order to free them from the stress (Armstrong et al., 2015), such as giving vacation days, work facilities, raising the salary, and many other way that the companies have tried. According to the research conducted by Megayana (2021) employees with over time work and have an excessive workload certainly might triggered and cause the job stress due to the exhaustion of a huge amount of energy physically and mentally and likely.

Hassan et al. (2020) indicate some factor that have been used for their research, the indicator is consist of the communication or social interaction of the employee either it is among the employees or between the employees to their supervisor or bosses, the environment of the organization, the state of mind or different way of thinking of the employees, and the physical health of the employees. Those indicator is using to measure the job stress of the employees.

According to Esguerra (2020) work life balance define as about creating and maintaining supportive and healthy work environments, to enable the employee’s to have a balance between work responsibilities and personal responsibilities and thus strengthen employee loyalty and productivity. The work life balance have been demonstrated to have an impact on employee in term of recruitment, retention/turnover, commitment, and satisfaction, in order to reduce the absenteeism, job level stress level, work life balance and accident rates, and the increased of productivity (Wood et al., 2020).

The inabilities to maintain a good work life balance condition, is turn out to having such a crucial roles to the employees itself. The inabilities to maintain the work life balance could be lead into the exhaustion and triggered the job stress of the employee, which affecting the job performance of the employee (Attar et al., 2020).
Esguerra (2020) indicate some factor that have been used for their research, the indicator is consist of work and career of the employees, the relationship of the employees with their friend and family, the employees personal and spiritual life, the romance or the relationship of the employees with their significant other or partner, the fitness or health state of the employees, the fun or recreational time that the employees take, and the financial state of the employees. Those indicator is using to measure the work life balance of the employees.

RESEARCH METHODS

This research is designed to examine the effect of job stress on job performance of the health workers with work life balance as the mediating variable. This research is using the quantitative method, to test hypothesis by using statistical methods. In this research, data collection was carried out by doing survey, unit analysis of this research the health workers of Public Health Center in Kabupaten Lima Puluh Kota.

The population of this research is 668 health workers of 22 Public Health Center in Kabupaten Lima Puluh Kota. By using the Isaac and Michael table the number of 668 employee later be rounded to 650 with significant rate of 10% the sample of the research will be 191 respondents. Therefore the research will take 191 health workers of Public Health Center in Kabupaten Lima Puluh Kota as the research samples.

This research is using questionnaire as the method to collecting the data, the questionnaire contains demography information of respondent and indicators of each variable (Krosnick, 2018). The choices of the answer will be processed by using a five-point Likert Scale, which is a scale that uses to measure attitudes, opinions, and perceptions of an individuals of group of people about certain social phenomena (Joshi et al., 2015).

By using the likert scale, the variables that will be measures are translated into variables indicators that serve as a starting point for compiling instruments in the form of statements. Measurement variable of job stress used instrument which was adopted from Hassna, et al (2020). The instrument consists of 16 items with five-point Likert Scale that shown one as strongly disagree and five as strongly agree. Measurement variable of job performance used instrument which was adopted from Bjaalid et al. (2019). The instrument consists of 4 items with five-point Scale that shown one as never/seldom and five as always/very often. Measurement variable work life balance used instrument which was adopted from Esguerra (2020). The instrument consists of 7 items with five Scale that shown zero as well balance, one until two is on the edge, and three to four is out of balance.

Data analysis technique in this research using the Structural Equation Model (SEM) by using software Smart PLS 3.0. PLS is an analysis variant-based structural equations that can simultaneously perform evaluation of measurement model as well as evaluation of structural model (Mueller & Hancock, 2018). Measurement of the model used to test the validity and reliability of research instruments, structural models are used for causality tests (hypothesis testing with a prediction model).

The data analysis by using Smart PLS consists of two sub models such as: 1) Measurement model, or also called outer model. The model explains the relationship between latent constructs and the manifest indicators that it has. And 2) Structural model, or also called inner model. The model explain the relationship between one latent variable with another in construction. The data will be obtained by the distributed questionnaires that were processed and analyzed with Smart PLS 3.0 software.

RESULTS AND DISCUSSION

Hypothesis test is used from the output path coefficients value by using bootstrapping on Smart PLS 3.0. In testing the hypothesis, it can be seen from the statistical T value in the output path coefficients. If the value of T statistic on the output path coefficients is greater than the value of T table (T statistic > T table) then the hypothesis is accepted or significant. However, if the value of T statistic is smaller than T table (T statistic < T table) then the hypothesis is rejected or not significant. Where T table can be calculated using the formula degree of freedom (df) = n – k, where n is the number of samples and k is the number of variables. Then the value of the T table in this study is nf = 191-3 = 188 with a level of significance of 95% (α = 5%), then the T table is 1.653.
This research is using a mediating variable, which is work life balance, mediation variable is the effect that explains the relationship between the independent variable and the dependent variable through a connecting variable or mediation. This research is using the mediating variable, the data test was carried out twice with the aim of obtaining direct and indirect relationships. Where the direct influence is the job stress on job performance. Obtained through the first data test, not through the mediating variable. The second data test is used to see the indirect effect between the dependent variable and the independent variable through the mediating variable. The following is the explanation of the direct and indirect relationship of the variable.

### Table 1 Direct Test

| Variable | T Statistic | T Table | Result |
|----------|-------------|---------|--------|
| JS -> JP | 2.638       | 1.653   | Supported |
| WLB -> JP | 9.867 | 1.653   | Supported |

Source: SPSS output

From Table 1 it shown that the results of the effect test without mediation, it shows that the statistical T value of the job stress variable on the job performance variable is 2.638, which is higher than the T table value of 1.653 (2.638 < 1.653), so there is a direct influence between job stress on job performance and a significant effect. And T value of the work life balance variable on the job performance variable is 9.867, which is higher than the T table value of 1.653 (9.867 < 1.653), so there is a direct influence between work life balance on job performance and a significant effect. Based on the results of the effect test without mediation, job stress influence to job performance can be tested further mediated by work life balance.

Mediation effect test is used to see the indirect effect of the mediating variable, which is work life balance between job stress on job performance variables. The test seen from the output path coefficients by looking at the statistical T value. Following is a statistical T table using the mediating effect.

### Table 2 Indirect Test

| Variable | T Statistic | T Table | Result |
|----------|-------------|---------|--------|
| JS -> JP | 2.517       | 1.653   | Supported |
| JS -> WLB | 7.658 | 1.653   | Supported |
| WLB -> JP | 8.679 | 1.653   | Supported |

Source: SPSS output

From Table 2 it shown that the statistical T value of the job stress variable on the job performance variable is 2.517, which is higher than the T table value of 1.653 (2.517 < 1.653), so there is a influence between job stress on job performance and a significant effect. Then the T value of the Job stress variable on work life balance variable is 7.658, which is higher than the T table value of 1.653 (7.658 < 1.653), so there is a direct influence between job stress on work life balance and a significant effect. And the T value of the work life balance variable on job performance variable is 8.679, which is higher than the T table value of 1.653 (8.679 < 1.653), so there is a direct influence between work life balance on job performance and a significant effect.

This research have one hypothesis with the mediation variable, which is the effect of job stress on job performance mediated by work life balance. After testing the significances of the variable and found the variable to be significant, following is the value of VAF from the hypothesis:

\[
VAF = \frac{66,601,626}{2.638 + 66,601,626} = 0.96190042967592 atau 96\% 
\]

To get the indirect effect value, it is obtained from the T value. The statistical relationship JS→WLB multiplied by WLB→ JP is 7.658 × 8.697 = 66,601,626. While the direct effect is 2.638 obtained from Table 4.51.

After obtaining the VAF value of the variable, which is the effect of job stress on job performance mediated by 96% work life balance, it can be categorized as a full mediation because the
VAF value is greater than 80%. But since the direct effect from job stress on job performance, work life balance on job performance, and job stress on work life balance is also significant, then technically work life balance has a partially influence in mediating job stress on job performance. It is happens because both of method, which is direct and indirect or with mediation variable and without the mediation variable is both significant affecting job performance of the health workers.

To answer the hypothesis, whether the hypothesis is accepted or rejected it can be seen from the output path coefficients on bootstrapping in Smart PLS 3.0 by comparing the T table with T statistics. If the T statistic is higher than the T table (T statistic > T table) then the hypothesis is accepted, but if the T statistic is smaller than the T table (T statistic < T table) then the hypothesis is rejected. Following is the hypothesis testing by looking at the output path coefficient.

| Variable   | T Statistic | T Table | Result     |
|------------|-------------|---------|------------|
| JS -> JP   | 2.517       | 1.653.  | Supported  |
| JS -> WLB  | 7.658       | 1.653   | Supported  |
| JS -> WLB -> JP | 96%     |         | Supported  |
| WLB -> JP  | 8.679       | 1.653.  | Supported  |

Source: SPSS output

In the discussion, the results of testing the relationship between variables on the hypotheses that have been previously tested will be presented. The influence of job stress and work life balance, on job performance at Public Health Center of Kabupaten Lima Puluh Kota. Following is the explanation and test results of the hypothesis.

H1: Job Stress Significantly Affect Job Performance

Based on the analysis for the first hypothesis, study identifies that job stress has a significant effect on job performance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota. The first hypothesis is supported, stress is an adaptive responses that can be mediated by the individual differences, with positive direction the existences of stress would able to increase job performance.

This study identify that job stress has a significant effect on job performance, this is because the number of health workers who can handle the stressor at their workplace is in the high number, the respondents who have a good communication at the work place are in the number of 49%, respondents who have a good social interaction at the work place are in the number of 50%, respondents who have a good/supportive environment at the work place are in the number of 46%, respondents who have a good/healthy physical health at the work place are in the number of 52%, the respondents who have an excessive workload are in the number of 18%, the respondents who have an task with high complexity are in the number of 18%, the respondents who have heard/feels several noises/distraction at the work place are in the number of 9%, the respondents who have something that prevent their self from achieving their target at the work place are in the number of 12%. The respondents who have a fear to get demotion at the work place are in the number of 9%, and the respondents who have experience bullying or harassment at the work place are in the number of 6%. The founding of this research shown that job stress has significantly affect job performance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota.

H2: The Work Life Balance Significantly Affect Job Performance

Based on the analysis for the second hypothesis, study identifies that work life balance has a significant effect on job performance, it can be identified that work life balance has an impact on job performance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota. Then the second hypothesis is supported.

This study identify the work life balance has a significant effect on job performance, this is because the number of health workers who have a well-managed work life balance at their workplace is in the high number, the respondents who have a good performance at work are in the number of 54%, respondents who have a good carrier path ahead are in the number of 47%, respondents who have a
good relationship with their friends are in the number of 48%, respondents who have a good relationship with family are in the number of 35%, the respondents who have a good personal life are in the number of 47%, the respondents who have a good spiritual state are in the number of 46%, the respondents who have good relationship with their partner are in the number of 35%, the respondents who takes time to have a recreation time are in the number of 47%, and the respondents who have a good financial management are in the number of 51%. The founding of this research shown that work life balance has significantly affect job performance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota.

H3: Job Stress Significantly Affect Work Life Balance

Based on the analysis for the third hypothesis, study identifies that job stress has a significant effect on work life balance, so it can be identified that job stress has an impact on work life balance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota. Then the third hypothesis is supported.

This study identify job stress has a significant effect on work life balance, this is because this is because the number of health workers who can handle the stressor at their workplace is in the high number and the number of health workers who have a well-managed work life balance at their workplace also in the high number. This is means the majority of respondent on this research has a well-managed job stress that allow them to fulfill the other responsibility outside of work responsibility, therefore they will have a well-balance work life. The founding of this research shown that job stress significantly affect work life balance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota.

H4: Job Stress on Job Performance Significantly Mediated By Work Life Balance

Based on the analysis for the fourth hypothesis, study identifies that job stress has a significant effect on job performance as mediated by work life balance, so it can be identified that job stress has an impact on job performance as mediated by work life balance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota. Then the second hypothesis is supported.

This study identify that work life balance has mediated the relation of job stress on job performance mediated by 96%, which can be categorized as a full mediation because the VAF value is greater than 80%. Which means that work life balance has a full influence in mediating job stress on job performance. The founding of this research shown that job stress on job performance significantly mediated by work life balance of Health Workers at Public Health Center of Kabupaten Lima Puluh Kota.

CONCLUSION

According to the result and analysis of research on chapter IV, the following conclusion can be drawn as job stress and work life balance has a significant effect on job performance of health workers in Public Health Center of Kabupaten Lima Puluh Kota. It shown that job stress and work life balance that have been experienced by the health workers will have an impact to their job performance. Also, job Stress has a significant effect on Work Life Balance of health workers in Public Health Center of Kabupaten Lima Puluh Kota. It shown that the stress that have been experience by the health workers can affect their work life balance depends on how well they handle the stressor is. Job stress that have been mediated by work life balance has a significant effect on job performance of health workers in Public Health Center of Kabupaten Lima Puluh Kota. It shown that job stress that have been experienced by the health workers that have been mediated by work life balance will have an impact to their job performance.

REFERENCES

Armstrong, G. S., Atkin-Plunk, C. A., & Wells, J. (2015). The relationship between work–family conflict, correctional officer job stress, and job satisfaction. Criminal Justice and Behavior, 42(10), 1066–1082.

Attar, M., Çağlıyan, V., & Abdul-Kareem, A. (2020). Evaluating the moderating role of work-life balance on the effect of job stress on job satisfaction. Istanbul University Journal of the School of Business Administration, 49(2), 201–223.
Bjaalid, G., Olsen, E., Melberg, K., & Mikkelsen, A. (2019). Institutional stress and job performance among hospital employees. *International Journal of Organizational Analysis*, 28(2), 365–382.

CSSEGI. (2021). *Covid-19 data repository*. Github. https://github.com/CSSEGISandData/COVID-19

Esguerra, I. D. G. (2020). Work-Life Balance and Job Stress of Employees of a Lone Agricultural College in Bulacan, Philippines. *Journal of Business on Hospitality and Tourism*, 6(2), 211–223.

Fogaça, N., Rego, M. C. B., Melo, M. C. C., Armond, L. P., & Coelho Jr, F. A. (2018). Job performance analysis: Scientific studies in the main journals of management and psychology from 2006 to 2015. *Performance Improvement Quarterly*, 30(4), 231–247.

Hassan, M., Azmat, U., Sarwar, S., Adil, I. H., & Gillani, S. H. M. (2020). Impact of job satisfaction, job stress and motivation on job performance: A case from private universities of karachi. *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 9(2), 31–41.

Idris, M., Khan, M. S., & Khan, M. U. (2020). Exploring the Influence of Job Stress on Job Performance: Mediated By Emotional Intelligence in Educational Context. *Research Journal of Social Sciences and Economics Review*, 1(2), 46–53.

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396.

Krosnick, J. A. (2018). Questionnaire design. In *The Palgrave handbook of survey research* (pp. 439–455). Springer.

Megayana, P. S. A. (2021). The Effect of Job Stress on Public Service Motivation and Job Performance on Employees at Bintang Semarapura Hospital General Hospital. *Enrichment: Journal of Management*, 12(1), 185–189.

Mueller, R. O., & Hancock, G. R. (2018). Structural equation modeling. In *The reviewer’s guide to quantitative methods in the social sciences* (pp. 445–456). Routledge.

Vijayan, M. (2017). Impact of job stress on employees job performance in aavin, Coimbatore. *Journal of Organisation and Human Behaviour*, 6(3), 21.

Wood, J., Oh, J., Park, J., & Kim, W. (2020). The relationship between work engagement and work–life balance in organizations: A review of the empirical research. *Human Resource Development Review*, 19(3), 240–262.

Zeb, A., ur Rehman, F., Imran, M., Ali, M., & Almansoori, R. G. (2020). Authentic leadership traits, high-performance human resource practices and job performance in Pakistan. *International Journal of Public Leadership*.