Workload and Motivation on Employees Performance Analyzed by Information Technology

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Abstract. The research purpose was to measure the relationship of workload and motivation to employee’s performance and the effect of motivation on employee’s performance, workload on employee’s performance, workload and motivation on employee’s performance. This research used a quantitative approach with the methods used such as observation, interviews, and questionnaires, data analysis was written using path analysis. Path analysis is a technique for analyzing causal relationships that occur in multiple regression. Relationship between workload and motivation on employee’s performance is 0.49. The effect of motivation on employee’s performance is significant at 30.05%, but the influence of workload on performance is non-significant at 5.46%. Workload and motivation on employee’s performance are significant at 35.51%. Based on these results, the workload and motivation have a strong and significant relationship. Although workload has a non-significant effect on employee’s performance partially, the workload and motivation have a significant effect on employee’s performance in medical manufacturing.

1. Introduction

Human resources are an important asset for the company, for the worker should be used optimally in order to contribute to the company’s performance. A frequent problem is the influence of the workload to the decline in performance of the worker, this is caused by the target to be achieved, their duties and responsibilities redundant, time-limited and their incompatibility with the ability to work which resulted in the emergence of job stress [1]. At the time of observation in several medical companies found a continuing lack of motivation to work on the workers, thus the search influences workload and motivation need to be tracked in order to improve employee performance.

The leader in a company will determine the atmosphere in the workplace workers. Their motivation given the leadership of the workers would improve performance [2]. Work motivation of workers will be reduced if the rewards obtained by workers lacking, whereas respect for the worker's performance should be a concern of companies [3]. Awards in the form of bonuses significantly affect performance, it is felt by many workers that more monetary rewards can motivate job than other reward [4]. Some things that can affect performance is the lack of motivation, education and a high workload [5]. Motivation has a positive and significant correlation with the performance [6].
This study tested the relationship between workload and motivation, tracking workload and motivation influence either partially or simultaneously on the company's performance in medical. Due to the discovery of a strong relationship between workload and motivation, the techniques used to discover the weight load on the performance and motivation is the path analysis.

2. Method

This research was conducted with a quantitative approach, the tools used were interviews and questionnaires for objects with saturated samples. The substance of the questionnaire contains two factors in the workload variable, namely external factors and internal factors [7]. Then, the motivation variable has five factors, namely self-actualization, self-respect, social ownership, security and physiological needs [8]. While the employee performance variable has five factors, namely quality, quantity, timeliness, effectiveness, and independence [9]. Theoretically, the liaison theory is found between motivation and workload variables [10], thus the relationship search technique and / or the effect of the three variables are solved by path analysis statistics.

3. Result and discussion

Figure 1 shows a design of motivation and workload path diagrams.

Path analysis is a technique for analyzing causal relationships that occur in multiple regression if the exogenous variables affect endogenous variables not only directly but also indirectly [11], where workload and motivation variables are exogenous variables and employee performance as endogenous variables. The design of the path diagram can be seen in Figure 1.

3.1. Relationship between exogenous variables

The relationship between motivation and workload variables has a strong positive value of 0.493 giving the understanding that an increase in workload will increase motivation as well as vice versa, a significance value of 0.004 < 0.05 indicates that the relationship between exogenous variables is significant. This phenomenon is different from research in the Pindad defense industry environment which indicates a relationship between motivation and workload has a negative direction where employees appreciate that their abilities are less supportive in completing their work [10]. Whereas in this study the phenomenon is different, namely the relationship between motivation and workload variables is positively positive, this difference is due to the general employee in the health company having work competencies that are in accordance with their expertise. The relationship between workload and motivation can be seen as a result of Statistical Product and Service Solution (SPSS) in Table 1.
Table 1 Relationship between workload and motivation

| Motivation | Pearson Correlation | Workload |
|------------|---------------------|----------|
| Motivation | 1                   | 0.493**  |
| Sig. (2-tailed) | 0.004               |
| N          | 32                  | 32       |

| Workload   | Pearson Correlation | Sig. (2-tailed) |
|------------|---------------------|-----------------|
| Pearson Correlation | 0.493**               |
| Sig. (2-tailed) | 0.004               |
| N          | 32                  | 32              |

The effect of motivation variables on performance variables and the effect of workload variables on performance variables

a. Effect of motivation and workload variables on performance variables

The calculation of the simultaneous influence of two exogenous variables produce a coefficient value of 0.355. This shows that motivation and workload simultaneously give an influence on employee performance by 35.5%. This is in accordance with research at the Bank BTN Branch Manado that workload and motivation together influence employee performance [12]. The significance value of the effect can be seen as a result of SPSS in Table 2. Based on the table, it can be seen that Sig value 0.002 < 0.05 which gives an indication that the influence of motivation and workload variables on performance is significant.

Table 2 Simultaneous significance test

| ANOVAa | Model | Sum of Squares | Df  | Mean Square | F      | Sig.  |
|--------|-------|----------------|-----|-------------|--------|-------|
|        | 1     | 2,305          | 2   | 1,153       | 7.975  | 0.002*|
|        | Residual | 4,191         | 29  | 0.145       |        |       |
|        | Total  | 6,497          | 31  |             |        |       |

a. Dependent Variable. Performance
b. Predictors. (Constant), Workload, motivation

b. Effect of each motivation and workload variable on performance

The path coefficient value for motivation toward performance can be seen in the value of standardized coefficients beta 0.515 while the path coefficient value for workload on performance can be seen in the value of standardized beta coefficients 0.139.

The effect of partial motivation on performance directly is (0.515 x 0.100) at 26.52% and the partial effect of motivation on performance indirectly is (0.515 x 0.493 x 0.139) x 100% at 3.53%. Thus, the partial effect of motivation on performance is 30.05%. Sig value motivation variable 0.005 <0.05 this indicates that this influence is significant. The results of the study showed harmony with the two studies conducted, namely research on the electronics industry in China as well as the oil and gas sector in Pakistan. The results of the correlation analysis in the study indicate that employee motivation has a positive and significant influence on employee performance [13] [14]. This shows that most employees are motivated to work to get rewards and recognition of their performance. When the employee realizes that he/she is recognized for the work performed, that improves motivation and results in delivering more than the required amount of output and result in higher degree of efficiency [13]. The indication of the influence of each motivation and workload on employee performance can be seen as a result of SPSS in BI Table 3.
Table 3 The path coefficient of motivation and workload on employee performance

| Model | Unstandardized Coefficients | Standardized Coefficients |
|-------|----------------------------|---------------------------|
|       | B     | Std. Error | Beta       | T     | Sig.  |
| 1 (Constant) | 0.923 | 0.520     | 1.774  | 0.087 |
| Motivation   | 0.465 | 0.155     | 0.515  | 3.007 | 0.005 |
| Workload     | 0.154 | 0.192     | 0.139  | 0.804 | 0.428 |

The effect of partial workload on performance directly amounted to (0.139) 2 x 100% of 1.93% and the effect of partial workload on performance indirectly amounted to (0.139 x 0.493 x 0.515) x 100% of 3.53%. Thus, the effect of partial motivation on performance is 5.46%. Sig value workload variable 0.428> 0.05 this indicates that this influence is not significant. This phenomenon is in accordance with the results of research conducted on housekeeping workers at the Lorin Sentul Bogor hotel which indicates that workload partially has a positive influence on employee’s performance [15], but the phenomenon is different in the condition of significance of the influence.

4. Conclusion

Based on the results and discussion in this study, it is known that the relationship between the variables of motivation and workload is positive and significant, this is because employees in health companies generally have work competencies that are in accordance with their expertise. Motivation and workload together provide a significant influence on employee performance by 35.5%. The effect of partial motivation on performance is significant at 30.05%, this indicates that most employees are motivated to get rewards and recognition for their performance. The partial effect of workload on performance is 5.46%, this indicates that poor employee performance is not caused by high workloads, because these health companies produce using production system automation.

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References

[1] S. B. Murali, A. Basit, and Z. Hassan. 2017. Impact of Job Stress on Employee Performance. *Int. J. Accounting and Business Management*. 5(2), pp. 13–33.
[2] D. Jatnika and M. Andarwati. 2018. The Effect of Motivation on Employee Performance Through Employee Satisfaction of The Tax Office in Surakarta. *Int. J. Economics, Business and Accounting Research*. 2(1), pp. 34–38.
[3] Muogbo and Uju S. 2013. The Influence of Motivation on Employees’ Performance: A Study of Some Selected Firms in Anambra State. *Int. J. Arts and Humanities*. 2(3), pp. 134–151.
[4] P. A. Omololo. 2015. Effect of motivation on employee performance of commercial banks in Kenya: A case study of Kenya Commercial Bank in Migori County. *Int. J. Human Resource Studies*. 5(2), pp. 87–103.
[5] D. Akcah. 2014. The Impact of Motivation on Employee Performance in the Manufacturing Industry in Ghana. *Global J. Human Resource Studies*, 1(5), pp. 291–310.
[6] S. A. Mohamud, A. A. Ibrahim, and J. M. Hussein. 2017. The Effect of Motivation on Employee Performance: Case Study in Hormuud Company in Mogadishu Somalia. *Int. J. Development Research*. 7(11) pp. 17009–17016.
[7] A. H. Maslow. 2013. *A Theory of Human Motivation*. Eastford: Martino Fine Books.
[8] A. Soleman. 2011. Analisis Beban Kerja Ditinjau dari Faktor Usia dengan Pendekatan Recommended Weight Limit (Studi Kasus Mahasiswa Unpatti Poka). *ARIKA* 5(2), pp. 83–98.
[9] S. Robbins. 2006. *Organisation Theory : Concepts and Cases*. Frenchs Forest: Pearson Education Australia.
[10] T. Kurniawati and A. Mubarak. 2015. Hubungan antara Beban Kerja dan Motivasi Kerja pada Pegawai Departemen Alat Peralatan Kapal Laut (APKL) PT. Pindad (Persero). Prosidng Penelitian Sivitas Akademika Unisba (Sosial dan Humaniora), 3(2)pp. 355–363.

[11] W. Fong-Silva, C. A. S. Sierra, J. J. Morales, Y. A. Marrugo, and E. A. Espinosa. 2017. Cognition and Its Relationship with Endogenous and Exogenous Factors in Engineering Students. Int. J. Applied Engineering Research. 12(17). pp. 6929–6933.

[12] A. T. Sitepu. 2013. Beban Kerja dan Motivasi Pengaruhnya Terhadap Kinerja Karyawan pada PT. Bank Tabungan Negara Tbk Cabang Manado. Jurnal EMBA. 1(4), pp. 1123–1133.

[13] C. Bao. 2015. The Impact of Motivation on Employee Performance in The Electronics Industry in China. Int. J. Accounting and Business Management. 3(2), pp. 29–45.

[14] K. Nizam and F. M. Shah. 2015. Impact of Employee Motivation on Organizational Performance in Oil and Gas Sector of Pakistan. Int. J. Managerial Studies and Research. 3(12) pp. 7–15.

[15] S. Harini, Sudarijati, and N. Kartiwi. 2018. Workload, Work Environment and Employee Performance of Housekeeping. Int. J. Latest Engineering and Management Research. 3(10). pp. 15–22.