

UDC 331

**OBSERVATIONAL STUDY ON THE EFFECT OF WORK PRODUCTIVITY, WORKLOAD,
AND WORK ENVIRONMENT TO PERFORMANCE DEVELOPMENT OF EMPLOYEES
IN PILARINDO BAKTI PERTIWI CORPORATION**

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ABSTRACT

Pilarindo Bakti Pertiwi Corporation is a company engaged in distribution of medical devices. A company experiencing business development is expected to create high productivity, as the company's level of productivity will determine its level of success. A decrease in company's work productivity in a company can occur due to increased employees' workload and unsupportive working environment conditions which lead to a decline in employee performance. This study aims to examine and analyze the effect of work productivity, workload and work environment on the performance development of Pilarindo Bakti Pertiwi Corporation employees. This type of research is quantitative explanatory with observational research methods. The results of this study conclude that: 1) work productivity has a significant effect on employee performance development, 2) workload has a significant effect on employee performance development of Pilarindo Bakti Pertiwi Corporation, 3) work environment has a significant effect on employee performance development in Pilarindo Bakti Pertiwi Corporation, and 4) work productivity, workload, and work environment has a simultaneously significant effect on employee performance development of Pilarindo Bakti Pertiwi Corporation.

KEY WORDS

Job productivity, job load, job environment, performance, performance development.

Pilarindo Bakti Pertiwi Corporation is a company engaged in distribution of medical devices. The company's productivity will be high if the employee performance development is also high. A developing company is expected to be able to create high productivity, as the level of productivity will determine the level the company's advancement.

According to Sauermann (2016), productivity is a mental attitude (attitude of mind) with the spirit to make improvements. In general, productivity implies an inverse comparison between the achieved results (output) with the overall resources used (input). The comparison changes from time to time as it is influenced by the level of education, work discipline, skills, work attitudes, motivation, work environment, and others. Productivity is not solely intended to get as much work as possible, but also the quality of work.

Individual productivity can be seen by what the individuals do in his work. Individual's productivity also means how a person carries out his work or how he performs. This also applies to the employees of Pilarindo Bakti Pertiwi Corporation; employees are required to carry out their work properly, improve the work quality and achieve highest work productivity. Problems found Pilarindo Bakti Pertiwi Corporation include decreasing work productivity as suggested in table 1 below:

Table 1 – Employee's work productivity from 2013-2017

Indicators	Expectancy (%)	Reality (%)				
		2013	2014	2015	2016	2017
Sales of medical devices	> 80%	83%	85%	90%	88%	91%
Networking and partnership	> 70%	77%	75%	78%	80%	85%
Level of supply	> 70%	75%	75%	74%	74%	77%
Level of demand	> 70%	77%	75%	78%	80%	85%
Level of returned items	< 5%	1%	0%	2%	3%	4%
Level of customer and client's complaints	< 5%	2%	0%	4%	6%	8%
Level of employee's errors: human error, misscommunication, etc.	< 5%	1%	0%	2%	3%	4%

Source: *Production Management of Pilarindo Bakti Pertiwi Corporation, 2018.*

Table 1 shows that all aspects of work performance indicators are at a fluctuating percentage level except for the customer and client's complaints that increased in 2015, 2016, to 2017, which even exceeded the 5% limit. Decreased work productivity in a company can occur due to increased workload of employees which results in decreased employee performance. According to Lazaroiu (2015), workload is the average frequency of activities of each job within a certain period of time. Workload greatly affects employee performance at work (Dartey-Baah, 2010).

Jayaweera (2015) states that the measurement of workload is defined as a technique for obtaining information on work efficiency and effectiveness of an organizational unit, or position holders carried out systematically by using job analysis techniques, workload analysis techniques or other management techniques. In view of Mensah and Tawiah (2016), workload calculation comes in 3 aspects, namely: 1) physical aspects (including workloads based on human physical criteria), 2) mental aspects (workload calculation in consideration of mental/psychological aspects), 3) aspects of the use of time (with emphasis on aspects of use of time for working). Analysis on employee workload is presented in table 2 below:

Table 2 – Analysis on percentage of employee's workload from 2013 to2017

Individual workload indicators	Standard of Achievement (%)	Percentage (%)				
		2013	2014	2015	2016	2017
Administration and managerial	80%	83	84	82	86	85
Job target and goal	80%	82	79	83	85	82
Zero Complaint	80%	75	77	78	80	83
Individual mentality and resistance	80%	81	82	82	84	83
Work time Effectiveness	80%	85	86	83	82	85
Company's operational cost efficiency	80%	84	85	83	86	85
Team work	80%	83	80	78	77	81
Average	80%	81,85	81,85	81,28	82,85	83,42

Source: *HRD Management of Pilarindo Bakti Pertiwi Corporation, 2018.*

Based on table 2 above, the average indicator of individual workload remained in the figure of 81.85% in 2013 to 2014, and then decreased in 2015 to 81.28%. Furthermore, an increase of 82.85% in 2016 and 83.42% in 2017 were recorded. But unfortunately, the target indicators and work targets did not reach the standard value in 2014 which was only 79%. The zero complaint indicator also failed to reach the standard in 2013 which was only 75%, in 2014 at 77%, and 2015 at 78%. Teamwork indicators failed to reach the standard value in 2015 which was only 78% and in 2016 which was 77%.

When determining employee workload, it is necessary for an organization to consider employee's capability to make sure that work processes within the organization runs smoothly. Reasonable workload burdened to the employees will support the smooth implementation of work.

Work environment is the one where employees do their daily work. A conducive work environment provides a sense of security and allows employees to work in an optimum way. Other physical environmental factors such as work climate, noise, lighting, etc. can affect

employee performance (Siddiq and Tangem, 2018). The physical environment conditions at PT Pilarindo Bakti Pertiwi Corporation are considered below standard, as suggested by uncomfortable working room (due to the absence of air-conditioner), and improper lighting. It is also necessary for other physical environments such as noise and vibration to be adjusted to the standards.

Non-physical environment factors include work relations formed among employees, between sub-ordinates and super-ordinates and the physical environment in which employees work (Jayaweera, 2015). The fact is, within the company under study, while there have been good relations among employees, no convenient relations between the sub-ordinates and super-ordinates have been found.

Employee performance is a focus of attention in an organization (Muda, Rafiki, and Harahap, 2014). In the view of Pawirosumarto, Sarjana, and Muchtar (2017), employee performance serves as a benchmark for measuring an employee's performance quality. An employee's work performance in a company can be measured by means of performance assessment (Pullen, 2014). With regards to the matter, Pilarindo Bakti Pertiwi Corporation's employee performance assessment is described in table 3 as follows:

Table 3 – Employee's Key Performance Indicator from 2013 to 2017

Performance Indicators	Expected Achievement (%)	Real Achievement (%)				
		2013	2014	2015	2016	2017
Work capability	> 75%	88%	90%	92%	85%	88%
Effort		78%	79%	78%	82%	88%
Interpersonal and communicative relations		79%	80%	83%	82%	85%
Work result and achievement		79%	80%	82%	83%	83%
Reward	< 70%	78%	81%	82%	84%	89%
Punishment	< 10%	4%	8%	11%	14%	15%

Source: HRD Management of Pilarindo Bakti Pertiwi Corporation, 2018.

Based on table 3, there was an increase in punishment from 2015 to 2017 that exceeded the expectations of achievement which should be below 10%. Punishment received by employees includes waiver of monthly bonus if the employee does not meet the work target; reprimand from the supervisor/supervisor for complaints lodged by customers or clients; and in the event that an employee commit fraud (cheating, fraud, or other violations) then the employee is imposed to administrative sanctions in the form of a reprimand, and even termination of employment.

Based on the above problems, the formulation of the problem is: is there an effect of work productivity, workload, and work environment on the performance development of Pilarindo Bakti Pertiwi Corporation employees both partially and simultaneously?

This study aims to examine and analyze the effect of work productivity, workload, and work environment on the performance development of Pilarindo Bakti Pertiwi Corporation employees, both partially and simultaneously. This research is expected to contribute to the development of the science of human resource development related to work productivity, work motivation, work environment, performance, as well as to be reference for other researchers wishing to conduct similar researches in human resource development.

LITERATURE REVIEW

Performance is the amount of effort spent by an individual on his work (Dobre, 2013). Meanwhile, according to Muda, Rafiki, and Harahap (2014), performance is a record resulting from the function of a particular job or activity during a certain period of time. According to Pawirosumarto, Sarjana and Muchtar (2017), there are six aspects of performance for individual employees, namely: 1) quality of work, 2) quantity of work, 3) promptness, 4) effectivity, 5) independence, and 6) work commitment.

Uddin, Luva, and Hossain (2012) are of the view that performance is influenced by the following factors: 1) personal factors (indicated by the level of skills, competencies, motivations, and individual commitments); 2) leadership factors (as demonstrated by the quality of encouragement, guidance, and support by managers and team leaders); 3) team factors (shown by the quality of support provided by co-workers), 4) system factors (indicated by the presence of facility work systems provided by the organization), and 5) contextual/situational factors (indicated by high levels of pressure and changes in the internal environment and external).

According to Upev, Chorun, and Idachaba (2015), performance development is the extent to which a person has played a part in implementing an organizational strategy, both in achieving specific goals related to individual roles and or by showing competencies that are otherwise relevant to the organization. Performance development is a multi-dimensional concept that includes three aspects, namely attitude, ability and achievement. According to Mohammad, Habib, and Zakaria (2010), employee performance development consists of several aspects as follows: 1) quantity of work, 2) quality of work, 3) job knowledge, 4) creativity, 5) cooperation, 6) dependability, 7) initiative and 8) personal qualities.

Hersey, Blanchard and Johnson as quoted by Mensah and Tawiah (2013) formulated seven factors that affect performance as represented in ACHIEVE acronym, namely 1) abilities (including knowledge and skills), 3) clarity (related to understanding of their work and perception of roles), 3) help (a factor in the form of support provided by the organization to its employees), 4) incentive (a motivation that arises due to additional revenue), 5) evaluation (coaching and performance feedback from the company for its employees), 6) validity (valid personnel practices), and 7) environmental fit.

The concept of productivity can basically be viewed from two dimensions, namely the individual dimension and the organizational dimension. Study of productivity from the individual dimension is nothing but an effort to see productivity, especially in relations to individual personality characteristics (Najam-us-Saharm, 2016). According to Upev, Chorun, and Idachaba (2015), there are 10 factors that are highly desirable by employees to increase employee productivity, namely: 1) attractive work, 2) good wages, 3) security and protection at work, 4) work ethic, 5) good work environment or facilities, 6) promotion and self-development in line with company development, 7) feeling involved in organizational activities, 8) understanding and sympathy for personal issues, 9) leaders' loyalty to subordinated, and 10) discipline for hard work.

Dartey-Baah (2010) states that the organizational unit activity load or workload of each employee should be evenly distributed to avoid having organizational units with too many activities and organizational units with too few activities, and to avoid having officials or employees with too much work and officials or employees with too little work to do. According to Dobre (2013), workload is a condition of work with job descriptions that must be completed at a certain time limit.

Workload can be further divided into excessive or too little workload, which arise as a result of tasks that are too much or too little given to the workforce to be completed within a certain time; and excessive workload or too little work, that is when people are unable to perform a task, or the task does not really require the skills and or potential of the workforce (Upev, Chorun, and Idachaba, 2015).

Workload is the ability of the worker's physical body to accept work (Mensah and Tawiah, 2016). From an ergonomic point of view, every workload received by a person must be adjusted and balanced with the physical and psychological abilities of workers who receive the workload (Mikkelsen, Jacobsen, and Andersen, 2017). Workload can take the form of physical workload and psychological workload (Lazaroiu, 2015). Physical workload may be in the form of performance of heavy work such as lifting, caring, encouraging, and doing all kinds of work (Siddiq and Tangem, 2018).

Work environment is something that exists in the environment of workers such as temperature, humidity, ventilation, lighting, noise, cleanness of the workplace, and the adequacy of work equipment which affect the way workers perform their tasks (Bryan and Sell, 2011). According to Chandrasekar (2011), the work environment can be interpreted as

the overall available tools, the environment in which a person works, their work methods, whether as individuals or groups. Meanwhile, according to Jayaweera (2015), work environment is an environment where employees conduct their daily work.

According to Siddiq and Tangem (2018), there are several indicators of the workplace environment condition, namely: 1) lighting, 2) temperature, 3) humidity, 4) air circulation, 5) mechanical vibrations, 6) unpleasant odors, 7) color control, 8) decoration, 9) music, and 10) safety. According to Uddin, Luva, and Hossain (2012), to create a good work environment, a number of things that must be considered, namely: 1) workplace buildings, 2) adequate workspaces, 3) air exchange ventilation, 4) availability of places for religious worship, and 5) the availability of convenient special and public transportation facilities for employees.

METHODS OF RESEARCH

This type of research is quantitative explanatory with observational research methods. Observational research is a research method using a questionnaire as a data collection instrument that aims to obtain information to find out why certain situations or conditions occur or what affects the occurrence of something (Almalki, 2016).

RESULTS AND DISCUSSION

Detection of the presence or absence of multicollinearity is attempted by looking at the tolerance value and the value of Variance Inflation Factor (VIF). If the VIF value is <10 and tolerance is > 0.1 , then the regression model is free from multicollinearity. The following are the VIF values generated by the regression model:

Table 3 – Result of multicollinearity test

Variable (X)	Tolerance	VIF	Information
Job Productivity (X_1)	0.519	1.862	Non-Multicollinearity
Job Load (X_2)	0.633	1.862	Non-Multicollinearity
Job Environment (X_3)	0.592	1.862	Non-Multicollinearity

Source: Primary Data, 2018.

Based on table 3 above it is known that all VIF values on the two independent variables in the regression model are less than 10 and tolerance of > 0.1 , so it can be concluded that the regression model is free from multicollinearity and therefore the assumption of non-multicollinearity is satisfied.

Testing on the presence or absence of heteroscedasticity is done by using a scatterplot between the predicted value of the dependent variable (ZPRED) and its residual (SRESID). If scatterplots produce points that do not form certain patterns, then heteroscedasticity does not occur. Here are the results of the heteroscedasticity test:

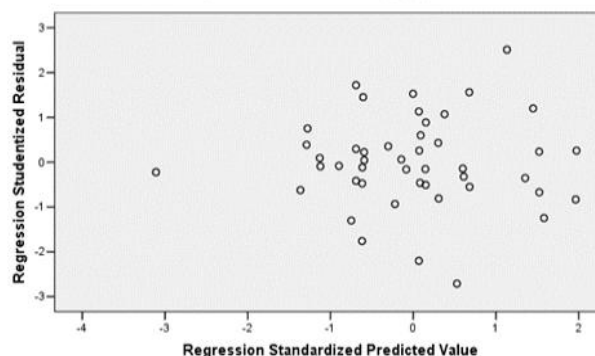


Figure 1 – Scatter plot of heteroscedasticity test (Source: Primary Data, 2018)

Figure 1 suggests that the dots do not form a particular pattern, which is marked by the dots scattering above and below the zero Y axis. These results indicate that there is no heteroscedasticity. In addition graphs, heteroscedasticity testing is also carried out by means of with Spearman rank correlation, result which is presented below:

Table 4 – Result of heteroscedasticity test

Variabel	Spearman Rank Coefficient	Significance	Remarks
Job Productivity (X_1)	0.161	0.285	Non-Heteroscedasticity
Job Load (X_2)	0.271	0.169	Non-Heteroscedasticity
Job Environment (X_3)	0.186	0.188	Non-Heteroscedasticity

Source: Primary Data, 2018.

Table 4 above indicates that significance value of Spearman rank correlation of the independent variable is higher than 0.05, and therefore it is concluded that no heteroscedasticity is found in the regression model, and therefore the non-heteroscedasticity assumption is satisfied.

Autocorrelation can be detected by using the Durbin Watson test (DW-test). An observation is said to have no autocorrelation if the Durbin Watson value is $dU < dw < 4-dU$. Following are the Durbin Watson values obtained from the regression model:

Table 5 – Result of autocorelation test

dU	DW	4-dU	Information
1.62	1.88	2.38	Non-Autocorrelation

Source: Primary Data, 2018.

Based on table 5 it is known that the Durbin-Watson (DW) value of the regression model is at the dU and 4-dU intervals, so these results indicate no autocorrelation in the regression model, and therefore the assumption of autocorrelation-free in the regression model is fulfilled.

The residual normality test procedure is performed by using the Kolmogorov Smirnov test. If the significance value generated from the Kolmogorov Smirnov test is > 0.05 ($\alpha = 5\%$), then the regression model residuals are normally distributed. The calculation results in the significance values of the Kolmogorov Smirnov residual test are as follows:

Table 6 – Result of normality data test

Kolmogorov Smirnov Test	Significance	Remarks
0.631	0.821	Normal

Source: Primary Data, 2018.

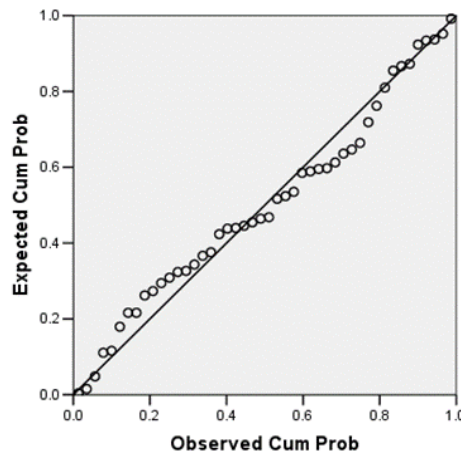


Figure 2 – Normal probability plot of normality data test (Source: Primary Data, 2018)

Based on table 6, the Kolmogorov Smirnov residual test produces a significance value of $0.821 > 0.05$, and it can be concluded that the residual regression model is normally distributed, thus assuming that residual normality is satisfied. The result can also be supported by using the Normal Probability Plot. If the dots on the graph scatter around the diagonal line, it is concluded that the assumption of normality is fulfilled.

Result of analysis on the effect of work productivity, work load, and work environment on performance development. The regression analysis results in the following regression equation:

$$Y = 1.655 + 0.232 X_1 + 0.252 X_2 + 0.264 X_3$$

The explanation of the regression equation above is:

$a = \text{constant} = 1.655$, meaning that if the independent variables X_1 , X_2 , and $X_3 = 0$, the value of the dependent variable (Y) is 1.655. In other words, if work productivity (X_1), workload (X_2), and work environment (X_3) have no effect, then performance development (Y) remains in a value of 1,655.

$b_1 = \text{work productivity regression coefficient } (X_1) = 0.232$, meaning that if X_1 changes to one digit, then Y will change by 0.232 assuming the variable X_2 is fixed. A positive sign on the value of the regression coefficient symbolizes a unidirectional relationship between X_1 and Y, meaning that if work productivity gets better, performance development will increase by 0.232.

$b_2 = \text{workload regression coefficient } (X_2) = 0.252$, meaning that if X_2 changes to one digit, then Y will change by 0.252 assuming the variable X_1 is fixed. A positive sign on the value of the regression coefficient symbolizes a direct relationship between X_2 and Y, meaning that if the workload gets higher, the performance development will increase by 0.252.

$b_3 = \text{work environment regression coefficient } (X_3) = 0.264$, meaning that if X_2 changes to one digit, then Y will change by 0.264 assuming the variable X_1 is fixed. A positive sign on the value of the regression coefficient symbolizes a unidirectional relationship between X_2 and Y, meaning that if the work environment gets higher, the performance development will increase by 0.264.

Testing of the effect of work productivity, workload, and work environment to performance development produces R (multiple correlation) and R^2 (multiple determination coefficient) values as follows:

Table 7 – Value of R and R^2

R	R^2
0.597	0.357

Source: Primary Data, 2018.

Based on table 7 above, it is known that the obtained R value is 0.597 which indicates that the effect of work productivity, workload, and work environment to performance development is quite strong. The obtained R^2 value is 0.357, which means that work productivity, workload, and work environment have an effect on performance development of 35.7% while the remaining 64.3% is influenced by other aspects.

To determine the effect of simultaneous independent variables on the dependent variable, F test is used. If F_{count} is $> F_{\text{table}}$ and with a significance value < 0.05 ($\alpha = 5\%$), the independent variables simultaneously has a significant effect on the dependent variable. F test results of the effect of work productivity, workload, and work environment to performance development are as follows in Table 8.

Based on table 8 above the F test results in $F_{\text{count}} = 8.326 > F_{\text{table}} 2.766$ ($df_1 = 3, df_2 = 57, \alpha = 0.05$) with a significance value of $0.000 < 0.05$, it is concluded that work productivity, work load, and work environment simultaneously and significantly effect performance development. This means that work productivity, work load, and work environment together

will affect performance development. Based on these results, the third hypothesis of the study (H_4) which assumed that there is an influence of work productivity, workload, and job environment on performance development together can be accepted and proven to be correct.

Table 8 – Result of F-test

Model	Sum of Squares	df	Mean Square	F_{count}	Significance
Regression	1.286	3	0.643	9.277	0.026
Residual	2.769	57	0.054		
Total	4.055	60			

Source: Primary Data, 2018.

To determine the effect of partially independent variables on the dependent variable, the t-test is used. If t_{count} is $> t_{table}$ and with a significance value of <0.05 ($\alpha = 5\%$), the independent variable partially has a significant effect on the dependent variable. T test results of the influence of work productivity, work load, and work environment to performance development are as follows:

Table 9 – Result of t-Test

Independent Variable	B	Beta	t_{count}	Significance Value	Remarks
Work productivity (X_1)	0.232	0.373	2.603	0.013	Significant
Work load (X_2)	0.252	0.311	2.174	0.035	Significant
Work environment (X_3)	0.244	0.329	2.411	0.024	Significant

Source: Primary Data, 2018.

Table 9 above suggests that:

1. Result of t-test between work productivity and performance development indicates a t_{count} value of $2.603 > t_{table}$ of 2.002 ($df = 57$, $\alpha / 2 = 0.025$) and a significance value of $0.013 < 0.05$. Based on these results it can be concluded that work productivity has a significant effect on performance development. Work productivity regression coefficient of 0.232 shows that work productivity has a positive effect on performance development. Based on these results, the first hypothesis of the research (H_1) which assumes that there is a significant effect of work productivity on performance development can be accepted and proven to be correct.

2. Result of t-test between workload and performance development suggests t_{count} value of $2.174 > t_{table}$ 2.002 ($df = 57$, $\alpha / 2 = 0.025$) with the significance value of $0.035 < 0.05$. Based on these results it can be concluded that workload has a significant effect on performance development. Workload regression coefficient of 0.252 indicates that work load has a positive effect on performance development. Based on these results, the second hypothesis of the study (H_2) which assumes that there is a significant effect of workload on performance development can be accepted and proven to be true.

3. Result of t-test between work environment and performance development indicates t_{count} of $2.411 > t_{table}$ 2.002 ($df = 57$, $\alpha / 2 = 0.025$) and with a significance value of $0.024 < 0.05$. Based on these results it can be concluded that the work environment has a significant effect on performance development. Work environment regression coefficient of 0.264 indicates that the work environment has a positive effect on performance development. Based on these results the third hypothesis of the study (H_3) which assumes that there is a significant influence of the work environment on performance development can be accepted and proven to be true.

CONCLUSION

Based on these results, it can be concluded that: 1) work productivity has a significant effect on the development performance of employees in Pilarindo Bakti Pertiwi Corporation, 2) workload has a significant effect on the development performance of employees in

Pilarindo Bakti Pertiwi Corporation, 3) work environment has a significant effect on the performance of employee development in Pilarindo Bakti Pertiwi Corporation, and 4) work productivity, workload, and work environment simultaneously effect the performance development of employee in Pilarindo Bakti Pertiwi Corporation.

REFERENCES

1. Almalki, S. (2016). Integrating quantitative and qualitative data in mixed method research. *Journal of Education and Learning*. Vol. 5 (3), pp. 288-296.
2. Bryan, C. & Sell, L. (2011). Job satisfaction, work environment, and rewards: Loadal theory revisited. *Labour*. 25 (1), pp. 1-23.
3. Chandrasekar, K. (2011). Workplace environment and its impact on organisational performance in public sector organisations. *International Journal of Enterprise Computing and Business Systems*. Vol. 1(1), pp. 1-19.
4. Dartey-Baah, K. (2010). Job satisfaction and load: understanding its impact on employee commitment and organisational performance. *Academic Leadership: The Online Journal*. Vol. 8 (4), pp. 4-9.
5. Dobre, O. I. (2013). Employee load and organizational performance. *REASER*. Vol. 5 (1), pp. 53-60.
6. Jayaweera, T. (2015). Impact of work environmental factors on job performance, mediating role of work load: a study of hotel sector in England. *International Journal of Business and Management*. Vol. 10 (3), pp. 271-281.
7. Lazaroiu, G. (2015). Employee load and job performance. *Linguistic and Philosophical Investigations*. Vol. 14, pp. 95-104.
8. Mensah, E. K. & Tawiah, K. A. (2016). Employee load and work performance: a comparative study in mining companies in Ghana. *Omnia Science Journal of Industrial Engineering and Management*. Vol. 9 (2), pp. 255-309.
9. Mikkelsen, M. F. Jacobsen, C. B. & Andersen, L. B. (2017). Managing employee load: exploring the connections between manager's enforcement actions, employee perceptions, and employee intrinsic load. *International Public Management Journal*. Vol. 20 (2), pp. 183-205.
10. Mohammad, J. Habib, F.Q. & Zakaria, S. (2010). Organizational citizenship behavior and commitment: do age and tenure make any difference? *Business & Management Quarterly Review*. Vol. 1 (3), pp. 28-49.
11. Muda, I. Rafiki, A. & Harahap, M. R. (2014). Factors influencing employee's performance: a study in the islamic banks in Indonesia. *International Journal of Business and Social Science*. Vol. 5 (2), pp. 73-80.
12. Najam-us-Sahar, J. (2016). Impact of personality type on job productivity. *Journal of Hotel and Business Management*. Vol. 5 (1), pp. 1-9.
13. Pawirosumarto, S. Sarjana, P. K., & Muchtar, M. (2017). Factors affecting employee performance of PT. Kiyokuni Indonesia. *International Journal of Law and Management*. Vol. 59 (4), pp. 602-614.
14. Pullen, W. (2014). Age, office type, job satisfaction, and performance. *Work & Place*. Vol. 9 (1), pp. 18-22.
15. Sauermaann, J. (2016). Performance measures and worker productivity. *IZAWOL*. Vol. 260, pp. 1-11
16. Siddiq, T. & Tangem, S. (2018). Impact of work environment, compensation, and load on the performance of employees in the insurance companies of Bangladesh. *South East Asia Journal of Contemporary Business, Economics, and Law*. Vol. 15 (5), pp. 153-162.
17. Uddin, M. J. Luva, R. H. & Hossain, S. M. M. (2012). Impact of organizational culture on employee performance and productivity: a case study of telecommunication sector in Bangladesh. *International Journal of Business and Management*. Vol. 8 (2), pp. 60-68.
18. Upev, M. T. Chorun, M. T. & Idachaba, J. A. (2015). The effects of load on staff productivity/performance at the Francis Sulemanuu Idachaba Library, University of Agriculture, Makurdi Nigeria. *IOSR-JRME*. Vol. 5 (2), pp. 1-7.