

Work Productivity In Lecturer: Case In The Private University In Yogyakarta, Indonesia

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Abstract: Workload and stress in the workplace are factors which can influence work productivity in lecturers. This study aims to empirically examine the effect of workload and work stress on the productivity of lecturers at the University of X Yogyakarta, Indonesia. The research subjects were 85 lecturers at the University of X Yogyakarta, Indonesia. The sampling technique was randomized by using a simple random sampling technique. Methods of collecting data are by using the scale of workload, work stress scale, and work productivity scale. Data analysis is carried out by multiple linear regression techniques. The results show that workload and work stress simultaneously affects lecturers' productivity (p -value = .019, ($p < .05$)), there is a significant effect between workload and lecturer work productivity as indicated by the value $p = .048$ ($p < .05$) and there is a significant effect of work stress on lecturer work productivity which is shown by the value $p = .037$ ($p < .05$).

Index Terms: Workload, Work Productivity, Work Stress, Lecturer, Stress, Productivity, Organization

1. INTRODUCTION

Human Resources (HR) is a significant asset which has a considerable influence on the progress of the company because HR has the potential to provide more energy and function as a driver of the organization's sustainability [1]. Mathis & Jackson [2] define human resources as a design of formal systems in an organization to achieve organizational goals effectively. Organizations must give significant attention to HR because their continuity and growth depend primarily on the productivity of their workforce, making it critical for any organization to have productive employees [3]. Work productivity is one of the most critical and influential basic variables that govern the organization's economic production activities [4]. Boyle [5] defines work productivity as a measure of the amount of output produced by units of input. Productivity as production, fertility, and generative ability [6]. There are two perspectives in seeing the concept of work productivity: individual and organizational. On the individual side, productivity is seen as a result of individual personality that emerges in the form of mental attitudes, implying the desires and efforts of those who always strive to improve quality of life. Meanwhile, the organization views things in terms of technical relations between input, output, quality, and quantity [7]. The impact of a high level of work productivity is that it can increase the standard of organizational income [8]. The results of Akinyele's study [8] found that low work productivity can create a less conducive work environment. According to Allmon, Haas, Borcharding, and Goodrum [9], a high level of work productivity can contribute to the general welfare of employees. Meanwhile, the low level of work productivity results in low income and organizational poverty [1].

Various organizations experience the problem of productivity in lecturers because the demands of lecturers are currently very high. Lecturers are faced with a variety of work, either from academic, non-academic, or administrative. The obligation of college philosophy which covers education and teaching, research, and community service must be carried out every semester. Also, they must carry out supporting activities outside the institution philosophy, such as conducting scientific activities, being involved in committees or task forces, and serving in the organizational structure. All work carried out is related to the demands of the amount and work quality, different work times, work deadlines. The measure of productivity refers to the factors used in indicators or measurements of work productivity, including the quantity of work, quality of work, and timeliness of [10]. If described in more detail, the obligations of the college philosophy and the supporting duties of the lecturers above will vary so that the productivity problems of the lecturer are often a problem. One of the factors that can affect productivity is the workload. The high level of workload received can cause fatigue and the decrease of energy to resolve demands and will have an impact on the decline in work productivity of employees [11]. According to Norrish and Rundall [12], the high and low level of workload that employees receive can affect their work productivity. Excessive workload will cause the task to be delayed, reducing employee work productivity [13]. The high level of workload charged to employees can harm themselves and the organization, because, the high level of workload can reduce work productivity [14].

The workload is the total amount of work that an individual must do in a certain period [15]. Haga, Shinoda, and Kokubun [16] define workload as the level of processing capacity that is released during work that reflects the power possessed by the demands of the work. The workload reflects the number or difficulty of one's work, which includes any variable [17]. Cooper, Dewe, and O'Driscoll [18] describe the workload as diverse demands, which include quantitative, qualitative, mental, and physical tasks. Another factor that affects work productivity is stress at work. Employees with negative stress cannot work optimally, resulting in a negative impact on work productivity [19]. According to Veloutsou & Panigyrakis [20], stress can reduce work productivity by creating conditions that disrupt one's ability to complete tasks effectively. Gates, Gillespie, & Succop [21] in their study, found that there is the influence between stress and work productivity, and the negative impact that results from stress is the decrease in

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work productivity. Employees who experience stress can affect work productivity [22]. Stress is a physiological reaction such as the increase of heart work, blood pressure, and the increase of sweat from the body. Psychological reactions include anxiety, fear, frustration [23]. According to Ivancevich, Konopaske, & Matteson [24], stress can be described as a tense, nervous, or worried feeling; all feelings are manifestations of stressful experiences. While work stress is a psychological state that causes a person to become dysfunctional in work, and stress is an individual response because of an imbalance between workload and ability to complete the work [25]. Kreitner and Kinicki [26] add work stress as an interaction between work conditions and worker characteristics that change the physical and psychological functions. This study aims to examine the effect of workload empirically and work stress on work productivity on lecturers at the University of X. The research hypothesis is that there is an influence between workload and work stress simultaneously on lecturer work productivity. Additionally, this study believes that workload and work stress independently influences lecturers' productivity.

2 RESEARCH METHOD

2.1 Population and Sample

The population in this study were all lecturers at the University of X Yogyakarta, Indonesia. The sample in this study is 85 lecturers at the University of X Yogyakarta, Indonesia. The selection of research samples is made through randomization (randomized), with a simple random sampling technique. The criteria of the population are mentioned as follows:

1. Permanent lecturer
2. Have already worked at least one year
3. Own the academic position, at least as the Expert Assistant

2.2 Instrumen

The scale is used in this study as the method of data collection, namely the scale of work productivity, work stress scale and workload scale. Work productivity is measured by the scale of work productivity compiled based on aspects of work productivity according to Simamora [10] which is used in indicators or measurements of work productivity including a quantity of work, quality of work and timeliness. The scaling model carried out on the scale of work productivity uses the Likert model scale. The workload is revealed by using the workload scale by referring to the intrinsic factors of workload according to Munandar [27], namely physical demands and task demands. The scaling model used for the workload scale uses a Likert scale model. Work stress revealed by the scale of work stress refers to aspects according to Schultz and Schultz [28]; Beehr and Newman [29]; Robbins [30], namely physiological, psychological and behavioral aspects. The scaling model used for the work stress scale uses a differential semantic model scale.

2.3 Instrument Validity and Reliability

Based on table 1, the trial results of the analysis of the reliability and validity items are as follows:

TABLE 1
VALIDITY AND RELIABILITY

Variable	Reliability	Corrected Item-Total Correlation
Work Productivity	.925	.312 until .685
Workload	.868	.308 until .687
Work Stress	.918	.318 until .740

Source: Research Result, 2019 (processed data)

2.4 Data Analysis

Parametric statistical methods were used for the analysis of research data. Data analysis was carried out using IBM SPSS 21 through multiple regression testing techniques, namely a statistical analysis technique to determine the effect of workload and work stress on work productivity. Test assumptions carried out before hypothesis testing are normality test, linearity test, multicollinearity test and heteroscedasticity test.

3 RESULT AND ANALYSIS

3.1 Assumption Test

3.1.1 Normality Test

TABLE 2
NORMALITY TEST

Variable	K-SZ Score	Sig.	Annotation
Work Productivity	.789	.520	Normal
Work Load	1.080	.314	Normal
Work Stress	.513	.734	Normal

Source: Research Result, 2019 (processed data)

Based on the results of the normality test analysis shown in table 2, it is known that the significance values of work productivity, workload, and work stress variables are .520, .314 and .734 which have $p > .05$ so that each data is normally distributed. It means that there is no difference between the score distribution sample and population score. In other words, the sample used is able to represent the population.

3.1.2 Linearity Test

TABLE 3
LINEARITY TEST

Variable	Sig.	Threshold	Annotation
Work Load	.000	$P < .05$	Linear
Work Stress	.000	$P < .05$	Linear

Source: Research Result, 2019 (processed data)

From the results of the workload linearity test on work productivity, we obtain the significance level (p) of .000, which indicates linearity. In other words, there is a straight line that connects the workload with work productivity variables. The linearity test results of work stress on work productivity

obtained a significance level (p) of .000, which indicates linearity or the presence of a line that connects between work stress and work productivity variables. Table 3 presents the linearity test results.

3.1.3 Multicollinearity Test

TABLE 4
MULTICOLLINEARITY TEST

Variable	Tolerance	VIF	Annotation
Workload	.868	1.152	No multicollinearity
Work Stress	.868	1.152	No multicollinearity

Source: Research Result, 2019 (processed data)

Based on Table 4 below, it is shown that workload and work stress have VIF values = 1.152 ($VIF < 10$) and tolerance .868 ($\text{tolerance} > 0.1$). This indicates that there is no multicollinearity between workload and work stress.

3.1.4 Heteroscedasticity Test.

TABLE 5
HETEROSCEDASTICITY TEST.

Variable	Sig.	Annotation
Workload	.314	No heteroscedasticity
Work Stress	.991	No heteroscedasticity

Source: Research Result, 2019 (processed data)

Based on table 5, we find that there the value of workload is .314 ($p > .05$) and work stress is .991 ($p > .05$), which implies that there is no problem with heteroscedasticity.

3.1.4 Regression Analysis

TABLE 6
MINOR HYPOTHESIS TEST

No	Variable	Sig	Threshold	Annotation
1	Workload towards Work productivity	.048	$P < .05$	Significant Effect
2	Work stress toward Work productivity	.037	$P < .05$	Significant Effect

Source: Research Result, 2019 (processed data)

Based on the results of the regression analysis in table 6, the magnitude of the effect of workload on work productivity with a significance value of $p = .048$ ($p < .05$), which means there is a significant effect workload on work productivity. The magnitude of the effect of work stress on work productivity has a significance value of $p = .037$ ($p < .05$), which means that there is a significant effect work stress on work productivity.

TABLE 7
TEST OF MAJOR HYPOTHESES

Variable	Sig.	Threshold	Annotation
Workload and work stress on work productivity	$P = .019$	$P < .05$	There is an influence

Source: Research Result, 2019 (processed data)

In table 7, the results of the regression analysis show the value of $p = .019$, ($p < .05$), which means that workload and work stress simultaneously influence work productivity. According to the results of the regression analysis, work stress, and workload simultaneously influence lecturers' work productivity. These results indicate that the first hypothesis is accepted, so that the working productivity variable of Universitas X Yogyakarta lecturers, Indonesia can be predicted based on workload and work stress. The results of the analysis show that the results of the second hypothesis study are accepted, meaning that there is a significant effect of workload towards work productivity on lecturers at the University of X Yogyakarta, Indonesia. This result is following the theory and previous research, which found that the workload of employees affects work productivity [11]. The results of the research are supported by Sjogren, Fochsen, Josephson, & Lagerstrom [13], who found that one of the factors to reduce work productivity is the workload. Munandar [27], every workload that is received by a person must be appropriate and balanced both to physical abilities, cognitive abilities and limitations of humans who accept these burdens, in other words, excessive workloads will influence work productivity on employees. Increased productivity is the dream of every company. Productivity measures the extent to which an activity can achieve the target quantity and quality set by the company [31]. The results showed that the third hypothesis was accepted which showed a significant effect of work stress on work productivity on lecturers at the University of X Yogyakarta, Indonesia. This result is in line with previous theories and studies, which found that work stress affects work productive [20]. In line with Gates' statement, Gillespie, and Succop [21] if employees feel a stress condition that exceeds the tolerance limit will directly relate to psychological disorders and physical disability. Therefore, the condition will cause a decrease as a whole of loyalty, work motivation, and work productivity. According to Robbins [32] in general, someone who experiences stress at work will display symptoms, namely physiological symptoms, psychological symptoms, and behavioral symptoms. Psychologically, stress can cause dissatisfaction, tension, anxiety, irritability, boredom, and procrastination. When employees are placed in jobs with many and conflicting demands or where there is a lack of clarity of duties, authority, and responsibility, stress will increase so that this will undoubtedly have an impact on the level of work productivity. The implications of this research are expected to provide insight and awareness to employees and the organization. This study shows that workload and work stress have a significant negative impact on work productivity. Organizations are expected to create a conducive and comfortable work environment to minimize the emergence of work stress because work stress can be derived from the environmental conditions of the organization. Organizations must also be able to be realistic in providing workloads on their employees and evenly distributed and balanced because

excessive workload can cause unresolved tasks on time and not the maximum results which lead to an impact on work productivity. Work productivity can improve the welfare of the organization, increase the standard of organizational income, create a conducive work environment so that to provide welfare and improve the quality of life for employees. The limitation in this study lies in the small number of samples, and it is expected that in subsequent studies, increasing the number of samples and the study population. The next researcher is expected to add or use other variables besides human relations and works independence so that they can know the effect of other variables.

4 CONCLUSION

Based on the results and discussion of the data, we conclude that workload and work stress simultaneously affect the work productivity of lecturers at the University of X Yogyakarta. Partially, there is also a significant effect workload towards work productivity and significant effect work stress towards work productivity on lecturers at the University of X Yogyakarta.

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