

# The Effect And Implications Of Work Stress And Workload On Job Satisfaction

Fatwa Tentama, Pusparina Arum Rahmawati, Pipih Muhopilah

**Abstract:** Job satisfaction is very important for the work productivity of employees. This study aimed to empirically examine the effect of work stress and workload on job satisfaction of employees. The study sample was 40 educational support staff who were permanent employees at the University of X in Yogyakarta. This study used simple random sampling technique. Data collection was conducted using the job satisfaction scale, work stress scale, and workload scale with a semantic differential and Likert scale model. Data were analyzed using multiple linear regression analysis supported by assumption tests, which includes the normality test, linearity test, and multicollinearity test. The results of the data analysis show that work stress and workload simultaneously affect job satisfaction and obtained an F-value = 12.274 and significance  $p = .000$  ( $p < .01$ ). There is a very significant effect of work stress on job satisfaction with a t-value = 4.307 and significance of  $p = .000$  ( $p < .01$ ). There is also a very significant effect of workload on job satisfaction, which obtained a t-value = 4.656 and significance of  $p = .000$  ( $p < .01$ ). Job stress and workload offer a contribution of 39.9% to job satisfaction with the remaining 61% being influenced by other variables.

**Index Terms:** Educational Support Staff, Employee, Human Resources, Job Satisfaction, Organization, Workload, Work Stress

## 1. INTRODUCTION

Human resources have a strategic position that contributes to realizing organizational goals that have a competitive advantage [1]. Employees with knowledge, skills, and creativity will greatly contribute to the achievement of company goals, indicating that human resources play the most crucial role in a company [2]. According to Harris, Winskowski, and Engdahl [3] organizations need to pay attention to human resource-related, among which are employee job satisfaction. Employee job satisfaction is an aspect that needs particular consideration from the organization because job satisfaction of employees determine organizational performance while low employee performance will determine whether or not organizational goals will be achieved [4]. Job satisfaction is considered a vital welfare index due to its influence on employee performance. The benefits of job satisfaction are not limited to individuals but also extend to organizations and even to co-workers [5]. According to Baloch [6], job satisfaction of employees impact organizations in such a way that allows employees to become more motivated and committed to improving the quality of their performance. Findings of Hsieh and Wu [7] show that individuals who have higher job satisfaction will work more optimally and productively. Thus by increasing employee job satisfaction, the organization's operational costs will decrease as a result of an increase in productivity, both in terms of quantity and quality, due to the job satisfaction of employees [5]. Conversely, the impact of employee job dissatisfaction is employees' resignation from their jobs, numerous complaints on assignments, transgression, stealing the organization's property or avoiding responsibilities given by the organization [8]. Employees tend to leave the organization if they feel dissatisfied with their jobs in the workplace [9]. According to McCalister, Dolbier, Webster, Mallon, and Steinhardt [10] a decrease in job satisfaction will result in low quality and quantity of work outputs and organizational commitment as well as high rates of absenteeism and turnover. Job satisfaction is the effectivity

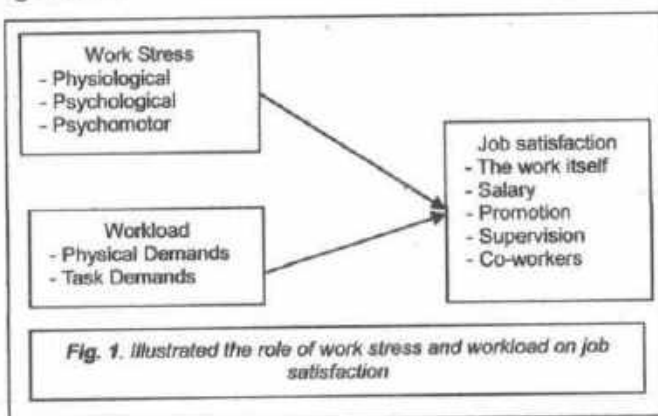
or emotional response to various aspects of work [11]. Robbins [12] defines job satisfaction as an accumulation of an individual's feelings towards his or her performance. According to Wexley and Yuki [13] job satisfaction is a generalization of an individual's attitude towards his or her work, based on various aspects of the work. Meanwhile, according to George and Jones [14] job satisfaction is an accumulation of feelings and beliefs (presuppositions) that each has about his or her current job. Job satisfaction reflects the feelings and attitudes of an individual toward his or her job [15].

Smith, Kendall, and Hulin [16] mentioned five aspects of job satisfaction, which include: 1). The aspect of work itself that is, a general attitude which comprises of an individual's perception, an individual's emotional reactions and opportunities for learning, as well as acceptance of work responsibility. 2). Salary aspects that is a general attitude which comprises of an individual's perception and an individual's emotional reactions to compensation or salary as a result of completing an assignment. 3). The promotional aspect that is a general attitude which includes an individual's perception and an individual's emotional reactions to aspirations, justice, or opportunities to develop/be promoted. 4). Supervision aspects that is a general attitude which includes an individual's perception and an individual's emotional reactions to the quality of supervision and the leadership style of superiors. 5). Co-worker aspects, that is a general attitude that includes an individual's perceptions of his or her co-workers in the organization. One of the factors involved in the formation of job satisfaction is high and low work stress [17]. According to McCalister, Dolbier, Webster, Mallon, and Steinhardt [10], high work stress has been proven to affect the level of welfare of organizations and employees. Excessive job stress leads to high job dissatisfaction, due to high demands, workplace conflicts, and lack of clarity regarding assignments that can, in turn, affect employee job satisfaction [18]. Job stress is a physiological and psychological reaction that results from an individual's interactions with threatening environmental situations [15]. This is in line with the opinion of Aamodt [19] who defined work stress as a psychological and physical reaction to (threatening) events or situations that originate from the work environment. Luthans [16] states that stress is the body's unspecific response to a demand or burden laid upon by superiors. Work stress is a condition that suppresses a

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person's psychological state in achieving an opportunity which requires the individual to overcome limits or barriers [8]. Another factor that determines employee job satisfaction is the amount of workload given by the organization [20]. The findings of Zamanian Sarvestani, Sedaghati, Ghalmini, and Kouhnavard [20] is supported by the findings of Butt and Lance [21] in which the amount of workload can affect job satisfaction. According to Khandan and Maghsoudipour [22], job satisfaction can be improved by reconsidering employees' amount of workload, as the excessive workload can reduce employee job satisfaction. The workload is defined as a variety of demands that include quantitative, qualitative, mental, and physical tasks [23]. According to Haga, Shinoda, and Kokubun [24], workload is a level of processing capacity exerted during work that reflects one's energy supply and task demand. Workload reflects the level or difficulty of one's work that may include any variable [25]. The workload is the total amount of work that must be completed by individuals within a specified period [26]. According to several experts, workload is the degree of attentional resource needed to fulfil the performance criteria affected by task demands and experience [27]. The workload can also be defined as the number of resources needed by a series of concurrent tasks as well as the use of resources needed to complete the task [28]. Based on the explanation above, the effect of work stress and workload on employee job satisfaction can be illustrated as fig.1 below:



effect of work stress and workload on employee job satisfaction; 2). There is an effect of work stress on employee job satisfaction, and; 3). There is an effect of workload on employee job satisfaction.

## 2 RESEARCH METHOD

### 2.1 Population and Sample

The population of this study was educational support staff at the University of X. The sample was 40 educational employees who worked at the University of X as permanent employees and had worked for at least one year. This study employed a simple random sampling technique.

### 2.2 Measurement Instruments

Job satisfaction was tested using a job satisfaction scale that refers to aspects of job satisfaction according to Smith, Kendall and Hulin [16], [11] namely aspects of the work itself, salary, promotion, supervision, and co-workers. Work stress was tested using the work stress scale which refers to aspects

of work stress according to Schultz and Schultz [29], Beehr and Newman [30], and Robbins [31], namely physiological, psychological and psychomotor aspects. The workload is tested using the workload scale, which refers to the intrinsic factors of workload according to Munandar [32], namely aspects of physical demands and task demands.

### 2.3 Instrument Validity and Reliability

Trial of measuring instruments was carried out on 60 educational support staff at the University of X Yogyakarta. The job satisfaction scale consists of 20 items. After testing, the scale achieved a reliability coefficient ( $\alpha$ ) of .957 with discrimination index (corrected item-total correlation) that ranges between .421 to .841. Based on these results, the job satisfaction scale is deemed a valid and reliable data collection tool. The job satisfaction scale takes form as a semantic differential scale. The work stress scale consists of 12 items. After testing the scale, the scale achieved a reliability coefficient ( $\alpha$ ) of .913 with a discrimination index (corrected item-total correlation) that range between .325 to .820. Based on these results, the work stress scale can be used as a valid and reliable data collection tool. The work stress scale takes form as a semantic differential scale.

The workload scale consists of 18 items. After testing the scale, its reliability coefficient ( $\alpha$ ) is .836 with a discrimination index (corrected item-total correlation) that range between .306 to .557. Based on these results, the workload scale can be used as a valid and reliable data collection tool. The workload scale takes form as a Likert scale.

### 2.4 Data Analysis

The research data were analyzed using parametric statistical methods. Data analysis was performed using IBM SPSS 21 through multiple regression techniques, which is a statistical analysis technique to determine the effect of two independent variables (work stress and workload) towards one dependent variable (job satisfaction). Assumptions testing was carried out before hypothesis testing, including normality test, linearity test, multicollinearity test, and heteroscedasticity test.

## 3 RESULT AND ANALYSIS

### 3.1 Assumption Test

#### 3.1.1 Normality Test

The result of the normality test can be seen in table 1 below.

TABLE 1  
NORMALITY TEST

Variable	K-SZ Score	Sig.	Annotation
Job Satisfaction	.447	.988	$p > .05$
Work Stress	.608	.854	$p > .05$
Workload	1.060	.211	$p > .05$

Source: Research Result, 2019 (processed data)

Based on the results of normality test shown in table 1 it was known that the significance values of job satisfaction, work stress, and workload were respectively .988, .854, and .211 which have  $p > .05$ , meaning that each data was normally



distributed so that it can be concluded that each variable had a distribution of normally distributed data.

### 3.1.2 Linearity Test

The results of the linearity test of work stress on job satisfaction obtained an F linearity of 21.869 with a significance level (p) of .000, which indicates linearity or the presence of a line that connects the work stress and job satisfaction variables. The linearity test results of workload on job satisfaction obtained an F linearity of 4.398 with a significance level (p) of .046, which indicates linearity or the presence of a straight line that connects the workload and job satisfaction variables. The linearity test results can be seen in table 2.

**TABLE 2**  
LINEARITY TEST

Variable	F Linearity	Sig.	Threshold	Annotation
Work Stress	21.869	.000	P<.05	Linear
Workload	4.398	.046	P<.05	Linear

Source: Research Result, 2019 (processed data)

### 3.1.3 Multicollinearity Test

The multicollinearity test was conducted to ensure that there is no multicollinear relationship between the two independent variables. Based on table 3, work stress and workload have a VIF = 1.250 (VIF <10) and tolerance =.800 (tolerance >.1), indicating no multicollinearity between work stress and workload. The multicollinearity test results can be seen in table 3.

**TABLE 3**  
MULTICOLLINEARITY TEST

Variable	Tolerance	VIF	Annotation
Work Stress	.800	1.250	No multicollinearity
Workload	.800	1.250	No multicollinearity

Source: Research Result, 2019 (processed data)

### 3.1.4 Heteroscedasticity Test

The heteroscedasticity test aimed to ensure that there is no problem with the heteroscedasticity. Heteroscedasticity was tested using the Spearman Rho test. Based on table 4, the significance value (p) of work stress is .223 ( $p > .05$ ), and workload is .437 ( $p > .05$ ), which means that there is no problem with heteroscedasticity in both variables. The heteroscedasticity test results can be seen in table 2.

**TABLE 4**  
HETEROSCEDASTICITY TEST

Variable	Sig.	Tolerance	Annotation
Work Stress	.223	P > .05	No heteroscedasticity
Workload	.437	P > .05	No heteroscedasticity

Source: Research Result, 2019 (processed data)

### 3.1.5 Hypotheses Test

The result of the analysis of the relationship between variables test can be seen in table 5 below.

**TABLE 5**  
ANALYSIS RESULT OF THE RELATIONSHIP BETWEEN VARIABLES

Variable	t	Sig	Threshold	Annotation
Work stress towards Job satisfaction	4.307	.000	p<.01	Very Significant Effect
Workload towards Job satisfaction	4.656	.000	p<.01	Very Significant Effect

Source: Research Result, 2019 (processed data)

Results of the regression analysis on the two independent variables, namely work stress and workload, on employee job satisfaction shows that work stress and workload simultaneously affect job satisfaction of educational support staff at the University of X. The results indicate that the first hypothesis is accepted, meaning that the job satisfaction variable can be predicted based on work stress and workload. Together, the two independent variables contribute 39.9% to job satisfaction, and the remaining 61% can be influenced by other variables. Testing of the second hypothesis found that there was a very significant effect work stress on employee job satisfaction of educational support staff working at the University of X, indicating that the hypothesis was accepted. The results are supported by the assumed theory as well as several other previous research which found similar results, for instance, findings of Al Khalidi and Wazalify's [33] show that one of the factors that influence job satisfaction is work stress. According to Brewer and McMahan-Landers [18], high work stress will impact job satisfaction. Meanwhile, the findings of McCalister, Dolbier, Webster, Mallon, and Steinhart [10] show that high work stress is related to low job satisfaction. Stressors at work, such as pressures and long working hours, can cause a variety of disease risks [34], which in turn leads to a decrease in the employees' quality of work, thereby reducing job satisfaction. High work pressure, when not accompanied by good self-regulation, can result in an interpersonal conflict, which results in performance decrease [35]. High job satisfaction will affect an employee's work productivity. High productivity will create an organizational climate that is favorable for the university, as it is managed by competent employees, thereby allowing the growth of the university itself. Testing of the third hypothesis found that there is a very significant influence between workload on job satisfaction in educational support staff at the University of X, indicating that the hypothesis is accepted. This is in line with previous theory and research, which found that employee workload affects job satisfaction [36]. Also, Butt and Lance [21] found that workload is among one of the factors that can reduce job satisfaction. The workload is the cost or amount spent by individuals to achieve a certain level of performance that arises due to the interaction between task requirements, the circumstances in which the task is performed, skills, as well as individual perceptions [37]. When an employee has a positive perception towards their work, that is that each effort to perform requires process and human resource that supports the completion of the aforementioned work, that is energy, time and even financial cost, then positive valuation and job



satisfaction towards one's job can be fulfilled. The so-called workload is a series of circumstances that mediate individual performance and perceptual, cognitive, and motorized tasks [38]. A high workload that is followed by consistency will have a positive effect, but high workload that is not accompanied by consistency will have a negative effect [39]. Perception about workloads and work problems will also change if employees receive support from their colleagues, supervision from superiors, as well as the autonomy/authority to complete their work [40]. The findings of this study have several practical implications. First, this research has reinforced that work stress is one of the main determinants of job satisfaction. Leaders of the university need to pay attention to the psychological conditions of their employees, and not to give demands and burdens that are too high as not to stress the employees. Leaders also need to create a comfortable work atmosphere and system in order for employees to work optimally in accordance with their abilities, subsequently achieving satisfaction with the results. Second, this study reinforces that workload is one of the main determinants of job satisfaction. Thus university leaders need to pay attention to the abilities and conditions of employees before defining and assigning tasks. Assignment of challenging assignments should be accompanied by direction and supervision and relevant time limits so that employees can do each task optimally. When there is a new assignment, the leader should provide clear instructions and assistance. The number of assignments given to employees should be adjusted to the abilities of employees, both in terms of physical and cognitive abilities. These efforts are carried out in order to allow employees to execute their tasks properly, in turn, leading them to feel satisfied with the results of their work and become motivated to complete other tasks. The current study is not without limitation. The sample is limited in educational employees who worked in university, and the number of subjects was limited. So it is unclear if results would generalize employees in another workplace. Future research should continue to examine this variable in another workplace with a greater subject number.

#### 4 CONCLUSION

Based on the results of data analysis in this research, it can be concluded that: 1) Simultaneously, there is a significant effect of work stress and workload on job satisfaction. 2) There is a very significant effect of work stress on job satisfaction. 3) There is a very significant effect of workload on job satisfaction. Job stress and workload contribute 39.9% to job satisfaction with the remaining 61% being influenced by other variables.

#### ACKNOWLEDGMENT

The author would like to thank the Institute of Research and Community Service (LPPM) of Universitas Ahmad Dahlan Yogyakarta for providing research funds so that this research could be carried out and resolve smoothly.

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