

## THE INFLUENCE OF WORK DEMANDS ON WORK STRESS THROUGH INTRINSIC MOTIVATION AS INTERVENING VARIABLES

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**Abstract:** *This research aimed to determine on the influence of work demands on work stress with intrinsic motivation as an intervening variable in Demak Regency. The population used the staff of the Demak District Education and Training Personnel Board. The sample had taken from 48 respondents. The research data came from two sources, i.e primary data and secondary data. This type of research was quantitative. These sampling used the purposive random sampling technique. The collected data were analyzed using Structural Equation Modeling (SEM) with SmartPLS ver 3.29 software.*

*The results of this study had the work demands that made a negative influence on intrinsic motivation while intrinsic motivation had the significant of positive influence on the work stress. On the other hand, work demands had the significant of positive influence on work stress while intrinsic motivation could not mediate the influence of work demands on work stress.*

**Keywords:** *work demands, intrinsic motivation, work stress.*

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### 1. Introduction

Human Resources is one of the main factors in driving organizational activities. Stress happens as part of daily life (Sengupta & Sengupta, 2017). Employees who experience stress at work are caused by the inability of their mental resources to meet the requirements of their work and this is considered threatening or even dangerous (Hessels, Rietveld, & Zwan, 2017). The high work demands given by the company to employees will trigger stress on employees which in turn affects their performance. Employees may perceive work demands as challenges because according to Van den Broeck et al (2010), work challenges can motivate and have a positive impact on employees. Work demands refer to aspects of the work context that impose on the personal capacity of the employees themselves (De Jonge & Dormann, 2006).

According to Locke and Schattke (Locke & Schattke, 2019) intrinsic motivation is defined as positive value experiences and interests. In essence, this intrinsic motivation is passion, pleasure and attraction. Motivation that exists in employees is also called intrinsic motivation, where intrinsic motivation is a work motivation that originates in the employee as an individual whereas in the form of awareness of the importance or meaning of the work or the benefits it carries out. Intrinsic motivation is also related to work demands, where work demands are several work requests that must be completed in a short and concurrent time. In work demands, there are aspects of time and aspects of work speed. Of the work itself requires effort (physical) and skills, because of this work demands also have an impact on the psychological, work pressure and emotional demands of employees (Hussain and Khalid, 2011).

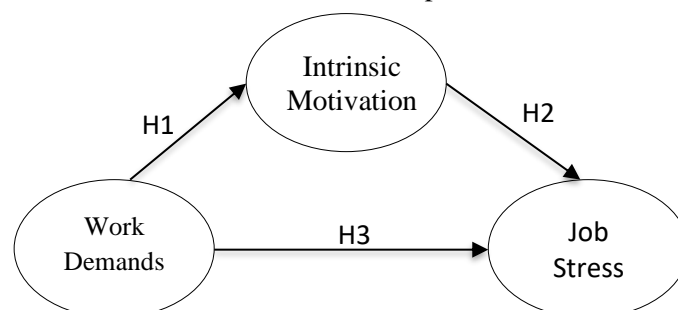
Demak District Education and Training Personnel Agency is one of the government agencies that provides excellent service to the State Civil Service. This also has an impact on psychological pressure which causes work stress to emerge in the research of Yusuf et al. (2020) showing that Work Demand and Work Resources has a positive relationship with Work Stress. This research is also supported by (Bowen et al., 2014), where too much work (work demands) is one of the main contributors to stress among

employees. Other research also states that work overload and working hours are significantly and positively related to work stress (Ellison & Caudill, 2020). However, the aforementioned research results contradict the results of research which states that work demands are highly dependent on improving internal locus of control. This implies that work demand does not cause dissatisfaction and work fatigue which is an indication of work stress (Manar Ali Bani, 2020)

Based on the description above, the purpose of this study is to determine the influence of Work Demands on Work Stress with Intrinsic Motivation as an Intervening Variable.

## 2. Research Method

This type of research is explanatory research and the population in this study is 48 employees of the Demak District Education and Training Personnel Board. This study used a census sample determination technique where the members of the population were the same as the sample, so the sample in this study was 48 respondents. Data collection methods use primary data and secondary data, data analysis techniques use SmartPLS ver 3.29 software, while the empirical framework is as follows:



Picture 2.1 The empirical study's framework

## 3. Result and Discussion

### 3.1. Result

Data analysis was conducted to test the validity of each indicator and the reliability of the constructs. The validity criterion is measured by convergent validity, while construct reliability is measured by composite reliability.

#### a. Validity test

The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is said to be valid if it is able to reveal something that will be measured by the questionnaire. This test was performed using the convergent validity measure on the PLS. The convergent validity value of each indicator can be seen from the loading value. Individual indicators are considered valid if they have a loading value above 0.70, however, in the research stage of scale development, loading 0.50 to 0.60 is still acceptable.

Table 3.1  
Result for Cross Loading

	X1	Y1	Y2
x1.1	0.785		
x1.2	0.839		
x1.3	0.717		
X1.4	0,481		
Y1.1		0.580	
Y1.2		0,811	
Y1.3		0,457	
Y1.4		0,666	
Y2.1			0,767
Y2.2			0,788

Y2.3			0,718
Y2.4			0,790

Source: Data processing with PLS, 2020

Based on the results of the validity test that has been carried out, it is known that not all questionnaire items that will be used to collect data are valid so they must be cut.

**Table 3.2**

**Result for Cross Loading After cutting**

	X1	Y1	Y2
X1.1	0.805		
X1.2	0.880		
X1.3	0.783		
Y1.1		0.620	
Y1.2		0,801	
Y1.4		0,769	
Y2.1			0,765
Y2.2			0,799
Y2.3			0,716
Y2.4			0,784

Source: Data processing with SmartPLS, 2020

The validity test for the reflective indicators uses the correlation between the item scores and the construct scores. Measurements with reflective indicators indicate a change in an indicator in a construct if other indicators of the same construct change (or are removed from the model). Reflective indicators are suitable for measuring perceptions, so this study uses reflective indicators. The table above shows that the loading factor provides a value above the recommended value of 0.5. It means that the indicators used in this study are valid or have met convergent validity.

**b. Reliability Test**

Reliability test is done by looking at the composite reliability value of the indicator block that measures the construct. The results of composite reliability will show a satisfactory value if it is above 0.7. Here is the composite reliability value for the output:

**Table 3.3 Composite Reliability**

	Composite Reliability
<i>Work Demands</i>	0.764
<i>Intrinsic Motivation</i>	0.782
<i>Work Stress</i>	0.767

Source: Data processing with SmartPLS, 2020

Table 3.3 above shows that the composite reliability value for all constructs is above 0.7 which indicates that all the constructs in the estimated model meet the criteria for discriminant validity. To strengthen the reliability test, testing was carried out with the Average Variance Extracted (AVE) value, if the AVE value was > 0.5 then the indicators used in research were reliable, and could be used for research.

**Table 3.4 Average Variance Extracted Value**

	AVE
<i>Work Demands</i>	0.678
<i>Intrinsic Motivation</i>	0.539
<i>Work Stress</i>	0.588

Source: Data processing with SmartPLS, 2020

Table 3.4 shows the results of the Average Variance Extracted (AVE) of each construct are good, which is above 0.5. An indicator is said to have good reliability if the Average Variance Extracted (AVE) value is above 0.5. It can be seen here that the value for Average Variance Extracted obtained has a value of >

0.5, from the above results all variables have an Average Variance Extracted value > 0.5 which means that it has a good reliability value and can be used for further research processes.

**c. Inner Model Test**

After the estimated model meets the Outer Model criteria, the next step is testing the structural model (Inner model). Here are the R-Square values of the construct:

**Table 3.5 R-Square**

	R-square
Intrinsic Motivation	0,264
Work Stress	0,413

Source: Data processing with SmartPLS, 2020

Table 3.5 provides a value of 0.264 for the construct of Intrinsic Motivation, which means that Work Demands are able to explain the variance of Intrinsic Motivation by 26.4%, the remaining 73.6% are explained by other variations that are not included in the model. The Adjusted R value is also found in Work Stress which is influenced by Work Demands and Intrinsic Motivation, namely 41.3%, the remaining 58.7% is influenced by other variables that are not included in the model.

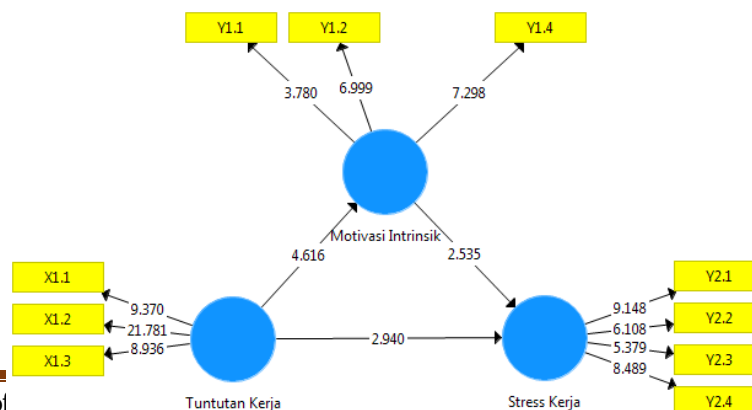
**d. Hypothesis testing**

**Table 3.6 Hypothesis Testing**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Intrinsik Motivation -> Work Stress	0.380	0.387	0.150	2.535	0.012
Word Demands -> Intrinsik Motivation	-0.526	-0.528	0.114	4.616	0.000
Work Demands -> Work Stress	0.374	0.365	0.127	2.940	0.001

Source: Data processing with SmartPLS, 2020

- 1) Table 3.6 shows that the original sample estimate value of work demands on intrinsic motivation is -0.526 which indicates that the direction of the relationship is negative. The relationship between work demands on intrinsic motivation is significant with a T-statistic of 4,616 > 1.98. Thus, the hypothesis H1 in this study which states that work demands have an influence on intrinsic motivation is accepted.
- 2) Table 3.6 shows the original sample estimate value between intrinsic motivation and work stress of 0.380 which indicates that the direction of the relationship is positive. The T-statistic value is 2.535 > 1.98 so that it is stated to have a significant relationship. Thus the H2 hypothesis in this study which states that intrinsic motivation has an influence on work stress is accepted.
- 3) Table 3.6 above shows that the T-statistic value of the relationship between work demands and work stress is 2,940 > 1.98 and the original sample estimate value is 0.374 which indicates that the direction of the relationship between work demands and work stress is significant positive. Thus the hypothesis H3 in this study which states that work demands affect work stress is accepted.



**Picture 3.1 Output Bootstrapping***e. Direct and Indirect Influence*

The analysis of direct, indirect and total influence analysis are intended to determine the influence of the hypothesized variables. The direct influence is the coefficient of all coefficient lines with an arrow one end or often called the path coefficient, while the indirect influence is the influence caused by intermediate variables. Meanwhile, total influence is the total multiplication of direct and indirect influences. Tests of the direct, indirect and total influences of each variable are presented in Table 3.7

**Table 3.7 Indirect Influences**

<b>Work Demands Against Work Stress Through Work Motivation</b>				
Influence	Relationship	Coefficient	P-Value	Information
<b>Direct</b>	Work Demands on Work Stress	0.374	0,003	<b>Significant</b>
<b>Indirect</b>	Work Demands on Work Stress through Intrinsic Motivation (-0.526 x 0.380)	0.200	0,031	<b>Significant</b>
	<b>Skor Total</b>	-0.199		

Source: Data processing with SmartPLS, 2020

Table 3.7 shows that the P-Value of Work Demands for Work Stress is ( $0.003 < 0.05$ ) and the P-Value of Work Demands on Work Stress through Intrinsic Motivation is ( $0.031 < 0.05$ ). So it can be seen that intrinsic motivation can mediate the relationship between work demands and work stress. Because the total influence of work demands on work stress through intrinsic motivation is smaller than the direct influence of work demands on work stress, on the other hand intrinsic motivation does not mediate the influence of work demands on work stress.

**3.2. Discussion**

1. The Influence of Work Demands on Intrinsic Motivation Based on the SmartPLS test results are in table 3.6 above on the first hypothesis. It is known that the original sample estimate result is -0.526, the t value is  $4.616 > t$  table (1.98) and the p value is  $0.000 < 0.05$ . There is a significant negative influence of work demands on intrinsic motivation. This means that the higher the work demands thus the lower the intrinsic motivation. These results are not in line with the research of Van den Broeck et al (2010) which stated that job challenges have a positive impact on employees.
2. The Influence of Intrinsic Motivation on Work Stress Based on the SmartPLS test results are in table 3.6 above on the second hypothesis. It is known that the original sample estimate result is 0.380, the t value is  $2.535 > t$  table (1.98) and the p value is  $0.012 < 0.05$ . There is a significant positive influence of intrinsic motivation on work stress. This means that the better the intrinsic motivation thus the better the work stress. These results are in line with Intan research, (2020) which states that motivation affects work stress.
3. The Influence of Work Demands on Work Stress Based on the results of the SmartPLS test are in table 3.6 above on the third hypothesis. It is known that the original sample estimate result is 0.374, the t value is  $2.940 > t$  table (1.98) and the p value is  $0.001 < 0.05$ . There is a significant positive influence of work demands on work stress. This means that the higher the work demands thus the higher the work stress. This result is in line with Bowen (2014) where job demands are one of the main contributors to stress in employees, this result is reinforced by Yusuf et al research, (2020) states that Job Demand and Job Resources have a positive relationship with Work Stress
4. The Influence of Work Demands on Work Stress through Intrinsic Motivation Based on the SmartPLS test results are in table 3.7 above on the fourth hypothesis. It is known that the coefficient value is 0.200, the p-value is  $0.031 < 0.05$  and the total score is -0.199. So it can be seen that intrinsic

motivation cannot mediate the relationship between work demands and work stress. In line with Yusuf et al research, (2020) states that job demand has a direct relationship to work stress.

#### **4. Conclusion**

##### **a. Conclusion**

Based on the results of the analysis that has been carried out, the following conclusions can be drawn:

From the results of testing the first hypothesis, it is known that the work demand variable has a significant negative influence on intrinsic motivation. This means that the hypothesis which states also has an influence of work demands on intrinsic motivation is accepted.

From the results of testing the second hypothesis, it is known that the intrinsic motivation variable has a positive and significant influence on work stress. This means that the hypothesis also has an influence of intrinsic motivation on work stress is accepted.

From the results of testing the third hypothesis, it is known that the work demands variable has a positive and significant influence on work stress. This means that the hypothesis which states also has an influence of work demands on work stress is accepted.

From the results of testing the fourth hypothesis, it is known that the work demand variable has a direct influence on work stress without going through work motivation as an intervening variable. This means that the intrinsic motivation variable cannot mediate the influence of work demands on work stress.

##### **b. Suggestion**

Based on the results of this study, the suggestions that can be given based on this research are:

Based on the results of cross loading for each indicator of the lowest work demands shows the pressure in time increases by 0.783, therefore it is necessary to pay attention to the timing of task execution so that employees can minimize work errors.

Based on the results of cross loading for each indicator of intrinsic motivation with the lowest Achievement of the target of 0.620, employees should be able to increase their competence and be oriented towards the values of worship.

Based on the results of cross loading for each indicator of work stress with the lowest inconvenience of 0.716, so steps that can be taken by the Demak District Education and Training Personnel Agency are the need to hold activities outside the office such as outbound to build togetherness.

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