The Influence of Work Stress and Work Environment on Employee Performance at the UPT Balai Yasa Yogyakarta Through Work Motivation as a Mediation Variable

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Abstract

This study examines the effects of job stress and the work environment on employee performance, both directly and indirectly through work motivation as a mediating variable, at UPT Balai Yasa Yogyakarta. A quantitative approach with an explanatory design was employed, and the study was conducted in June 2025. The population consisted of 260 employees from various work units, with a sample of 158 respondents selected using proportional random sampling. Data were collected through a closed-ended Likert-scale questionnaire and tested for validity and reliability using convergent validity and composite reliability with SmartPLS 3.0 software. Data analysis was carried out using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) technique, which included outer model testing, inner model testing, and path analysis. The findings indicate that job stress has a positive but insignificant effect on employee performance. In contrast, the work environment has a positive and significant effect on employee performance. Job stress also shows a negative and insignificant effect on work motivation, whereas the work environment has a positive and highly significant effect on work motivation. Furthermore, work motivation has a positive and significant effect on employee performance. Regarding the mediating role, work motivation does not significantly mediate the relationship between job stress and employee performance. However, work motivation significantly and positively mediates the relationship between the work environment and employee performance. Based on these results, the study recommends that organizations place greater emphasis on improving the work environment as a strategic approach to enhancing employee motivation and performance.

Keywords: *work stress; work environment; work motivation; employee performance; SEM-PLS.*

INTRODUCTION

Human resource management (HRDM) is the most valuable and most important asset owned by an organization, because the success of the organization is highly determined by the human element. The quality and productivity of the organization depends on how management is implemented, including at the UPT Balai Yasa Yogyakarta. In this context, employee performance plays a key role in improving productivity and operational efficiency, especially in companies that handle the maintenance and repair of railway facilities, where transportation reliability and safety are top priorities (Napitupulu & Indrawan, 2023).

The railway maintenance sector presents unique challenges that distinguish it from conventional organizational environments. Employees at UPT Balai Yasa Yogyakarta operate under conditions characterized by high-risk machinery operations, exposure to physical hazards, stringent safety protocols, and time-critical maintenance schedules that directly impact national transportation infrastructure. However, various challenges can affect the achievement of optimal performance. Target pressure, responsibility for passenger safety, and fast work rhythms have the potential to cause work stress for employees (Chand & Chand, 2014). Work stress is defined as a

process of interaction between individuals and their work environment, which indicates the accumulation of negative emotions caused by their workload and appears as an uncontrolled psychological and emotional response (Aurellia & Prihastuty, 2022). If left unmanaged, stress can lead to decreased focus, fatigue, increased errors, and decreased productivity. According to the latest Labour Force Survey (LSC) data published by the Health Safety Executive (HSE), there were 602,000 cases of work-related stress, depression or anxiety in 2018/2019, up from 595,000 cases in 2017/2018 (Putra et al., 2024).

This condition is also reflected in work accident data at the UPT Balai Yasa Yogyakarta in 2024. Throughout January to October, there were various incidents such as pinching, burns, and falls, with the number of cases ranging from 1 to 5 every month. The peak of incidents occurred in March and June, with 5 incidents each.

This trend indicates that work environments involving heavy machinery, high noise levels, and intensive physical activity pose a real safety risk. These risks not only impact the physical condition of employees, but can also exacerbate mental stress and lower work motivation.

Some previous studies, such as only research conducted by (Putranto & Wijaya, 2024) stated that work stress has a strong correlation with decreased employee performance. However, there is another study that states the opposite, namely that work stress at a certain level can increase work morale so that it results in good performance (Affini, 2021). On that basis, it is important in this study to conduct tests related to how work stress affects employee performance at Balai Yasa Yogyakarta.

In addition to work stress, employee performance is also influenced by the conditions of the work environment. The work environment is something that is around the worker, both physical and non-physical, so that whether the environment is comfortable or not will affect the conditions at work. Therefore, the work environment should be a concern for organizations or companies. According to Sedarmayanti 2009, some of the indicators of the work environment are lighting, air temperature, noise, use of colors, necessary movement space, work safety, and employee behavior (Retrieved, 2019). At Balai Yasa Yogyakarta, a work environment that is loaded with heavy machinery, noise, and the risk of accidents can be a source of discomfort or vice versa. In this context, the research will analyze the extent to which the work environment affects employee performance.

In the January-March period, all work could be completed on time without delays, but from April there was a decline in performance with 25% of the work experiencing delays, which worsened in August and October with a punctuality rate of only 67% and 50%, respectively, thus indicating a gradual decline in operational performance throughout 2024. This is in line with the increase in employee overtime from 3% in January to 23% in October, which indicates an increase in workload, pressure, fatigue, and possible weaknesses in capacity planning and time management. Employee performance problems affected by work stress and the work environment, according to McClelland, can be overcome through work motivation (Ansyari & Kasmir, 2018), but other findings show that work motivation is not necessarily significant in mitigating work stress and a poor work environment on performance (Pravitasari, 2023). These differences in

empirical results are an important basis for placing work motivation as a mediating variable in research, in order to test whether motivation serves as a buffer mechanism against negative impacts or as a catalyst that reinforces positive influences. In the context of the UPT Balai Yasa Yogyakarta, this study is relevant to understand whether efforts to increase motivation are able to transform the pressures and challenges of the work environment into better performance, thus providing a clearer basis for management in designing targeted interventions.

On the basis of the above problems and the absence of research that specifically examines the influence of work stress and the work environment through work motivation as a mediating variable at UPT Balai Yasa Yogyakarta, it is important to conduct further research to find out whether work motivation can improve employee performance due to stress and a bad work environment or vice versa. Based on these problems, the author is interested in conducting research on work stress and the work environment at UPT Balai Yasa Yogyakarta, so the author chooses the title of the research in the form of the influence of work stress and the work environment through work motivation as a mediating variable on employee performance at UPT Balai Yasa Yogyakarta.

Based on the research background, it can be identified that the main problems at UPT Balai Yasa Yogyakarta include the high level of work stress which is characterized by an increase in overtime and the incidence of work accidents throughout 2024, a decrease in employee performance as seen from delays in completing work, and a decrease in work motivation due to a high workload and a less conducive work environment. Less supportive physical work environment conditions, such as noise, uncomfortable temperatures, and the risk of accidents, are exacerbated by low management involvement and a lack of a positive work culture, resulting in an impact on overall employee effectiveness, motivation, and performance.

To maintain the focus and clarity of the study, this study was limited to the influence of work stress and work environment on employee performance with work motivation as a mediating variable. The study aims to analyze the direct and indirect influence of these two variables on employee performance at UPT Balai Yasa Yogyakarta. The results of the research are expected to make a theoretical contribution to the development of human resource management studies as well as practical benefits for students, academics, companies, and researchers in understanding and formulating strategies to increase employee motivation and performance through stress management and the creation of a more conducive work environment.

METHOD

This study used an associative quantitative approach with an explanatory design that aims to explain the cause-and-effect relationship between work stress, work environment, work motivation, and employee performance at UPT Balai Yasa Yogyakarta. Data was obtained through a four-point Likert scale questionnaire distributed to employees, with work motivation acting as a mediating variable. The study population was 260 employees, while the sample was determined using the Slovin formula with an error rate of 5% so that 158 respondents were obtained. The sampling technique used is proportional random sampling, with proportional distribution of samples in six work groups. The research instruments were compiled based on indicators adapted

from previous research, including work stress, work environment (Sedayu & Rushadiyati, 2021), work motivation (Mangkunegara in Nur Azizah, 2019), and employee performance (Bernardin & Russell in Lestary & Chaniago, 2018). The research was carried out at the UPT Balai Yasa Yogyakarta in the period March-June 2025.

Data analysis was carried out using SEM–PLS through SmartPLS 3.0 software, which allows testing of direct and indirect relationships between latent variables. The instrument test included validity and reliability, with validity evaluated through convergent validity (loading factor > 0.70) and discriminant validity (Fornell–Larcker, cross loading, and HTMT), as well as reliability through composite reliability and Cronbach's Alpha (> 0.70) (Ghozali, 2021; Hair et al., 2014; Ghozali & Latan, 2015; Muhson, 2022). The evaluation of the structural model included R-Square (R^2), Predictive Relevance (Q^2), Goodness of Fit (GoF), and F-Square, while the hypothesis was tested using the bootstrapping method using the t-statistic criteria > 1.96 and p-value < 0.05. Path analysis is used to assess direct and indirect effects, so that it can be determined whether work motivation plays a role as full or partial mediation in the relationship between work stress and the work environment on employee performance.

RESULT AND DISCUSSION

1. Descriptive Analysis of Respondent Characteristics

a. Gender

Table 1. Characteristics of Respondents by Gender

Gender	Frequency	Presentase
Men – men	153	96.84 %
Women	5	3,16%
Total	158	100%

Source: Primary Data 2025

b. Age

Table 2. Characteristics of Respondents by Age

Age	Frequency	Presentase
< 20	4	2,53 %
21 – 30	35	22,15 %
31 – 40	71	44,94 %
41 – 50	21	13,29 %
>51	27	17,09 %
Total	158	100 %

Source: Primary Data 2025

c. Working Class

Table 3. Characteristics of Respondents by Work Group

Working Class	Frequency	Presentase
Top Frame	40	25.32 %
Bottom Frame	24	15,19 %
Electric Traction & Instruments	32	20,25 %
Auxiliary	19	12,03 %
Diesel	25	16,46 %
Logam	18	11,39 %

Total	158	100 %

Source: Primary Data 2025

d. Job Titles

Table 4. Characteristics of Respondents Based on Job Title

Job Titles	Frequency	Presentase
Asistant Manager	5	3,14 %
Supervisor	13	8,18 %
Junior Supervisor	18	11,32 %
Implementers	122	77,36 %
Total	158	100 %

Source: Primary Data 2025

2. Quantitative Analysis

a. Outer Model

The outer model aims to test the validity and reliability of research instruments. The examiner can determine whether the questionnaire used is valid and the extent to which the questionnaire measurement results are consistent and can be proven to be correct. This process uses the SmartPLS 3.0 application by taking three measurements, namely: Convergent Validity, Composite Reliability, and Discriminant Validity.

1) Convergen Validity

This test looks at the value of the loading factor. If the loading factor value > 0.70, the indicator is declared valid. Outer loadings above that the work stress variable consists of 9 statements with a loading factor value of >0.70. The work environment variable consists of 6 statements having a loading factor of >0.70. The work motivation variable consisting of 9 statements has a loading factor of > 0.70. The employee performance variable has 8 statements with a loading factor of 0.070. So all variables have a lag factor of more than >0.70 which means that all statement items are declared valid and relevant for the analysis stage.

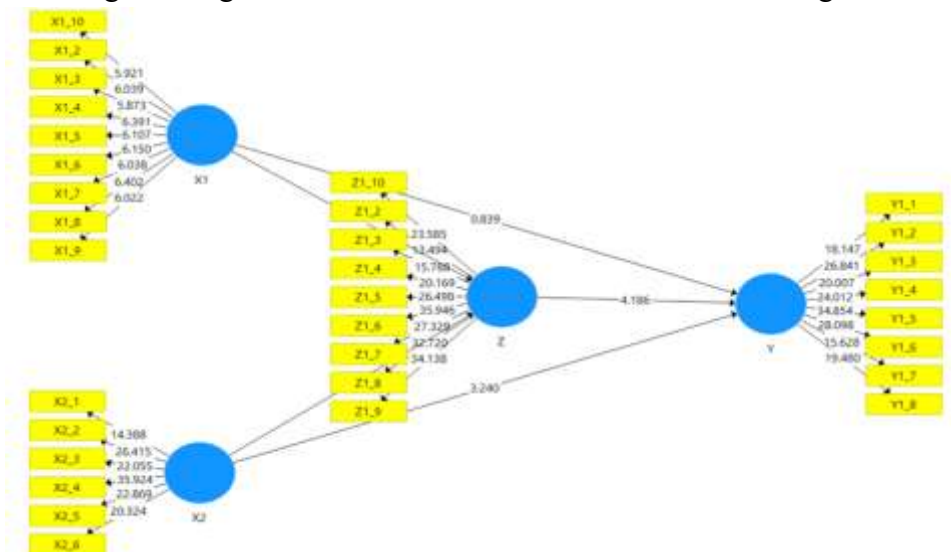The following is a diagram of *the create model* from the outer loadings test.

Figure 1. Outer Loadings
Source: Primary Data 2025

2) Composite Reliability

Composite reliability is one of the indicators that measures the reliability of the construct. Composite Reliability measures the internal consistency of indicators in representing a construct. If the Composite Reliability value > 0.70, then the variable is declared reliable. The following is the value of Composite Reliability.

The composite reliability value in the work stress variable was 0.984, the work environment variable was 0.931, the employee performance variable was 0.947, and the work motivation variable was 0.944. All variables have a composite reliability value > 0.70 which means that all variables are declared reliable which means that this research instrument has good internal consistency and can be trusted to measure constructs.

Average Variance Extracted (AVE) value. The Average Variance Extracte value is used to assess the validity of the convergent from the latent construct. The average variance extract value displayed side by side with the composite reliability value because the two complement each other in assessing the quality of latent constructs. Average Variance Extracte testing is important to ensure that the constructs in the model are actually validly measuring. The AVE value is considered valid if > 0.5. It can be seen that all of the above variables have an AVE value of > 0.5 which means that all indicators are valid.

3) Discriminant Validity

Discriminat Validity is a test that is carried out to test the extent to which a measuring instrument is able to measure exactly what it should be measured. The Discriminat Validity test has three methods to assess the Fornell-Lacker Criterion, Cross Loadings, and Heterotrait-Monotrait Ratio (HTMT).

a) Fornel-Lacker Criterion

The Fornell-Lacker Criterion is a technique for comparing the square root of the Average Variance Extrace (AVE). Discriminat Validity is considered to be achieved if the square root of AVE of a construct is higher than the correlation between other constructs.

Table 5. Fornel-Lacker Criterion

	Work Stress	Work Environment	Employee Performance	Work Motivation
Work Stress	0.933			
Work Environment	0.055	0.833		
Employee Performance	0.088	0.620	0.831	
Work Motivation	0.018	0.619	0.637	0.809

Source: Primary Data 2025

The construct of the table above has *a good discriminant validity* with the root value of AVE must be greater than the correlation coefficient. Specifically, the square root value of AVE of the work stress variable was 0.933, the work environment variable was 0.833, the employee performance variable was 0.831, and the work motivation variable was 0.809. Almost all consistency values that exceed the correlation between latent constructs have good discriminant validity.

b) Cross Loading

An indicator will meet discriminant validity if it has a higher loading value (>) on its own construct compared to the loading value of other constructs.

Results; cross loading testing on each indicator of all variables had a higher loading value on the construct itself compared to the value of other constructs. This shows that all values in the cross loading test have good discrinant validity.

c) Heterotrait-Monotrait Ratio (HTMT)

The Heteroit-Monotrait Ratio (HTMT) is a test that assesses a threshold of 0.90. If the HTMT value is greater than 0.90, then the discriminant validity is considered unfulfilled. all values are less than 0.90. It can be concluded that the discriminant validity value is met.

b. Inner Model

The inner model in SmartPLS aims to measure the structural relationships between latent constructs in the research model. Through the analysis of the inner model, the research can see the strength and direction of direct influence between one construct and another. The following are the results of the internal model testing.

1) R-Square

The R-Square test aims to show the level of contribution of independent variables in influencing dependent variables simultaneously. There are three classifications of interpretation of the R-square value (R2), namely 0.25 (weak), 0.50 (medium), and 0.75 (high)

Based on the test results, the R-Square (R^2) value for the employee performance variable is 0.491. This means that 49.1% of variations or changes in employee performance can be explained by independent variables, namely work stress, work environment, and work motivation (as mediating variables). Meanwhile, the remaining 50.9% was influenced by other variables that were not included in this research model.

So the value of 0.491 is in the weak to close to medium category. This shows that the predictive power of the model on employee performance variables is still relatively low, so the contribution of work stress variables, work environment, and work motivation in explaining employee performance is not strong enough simultaneously.

Similarly, for the work motivation variable, an R-Square value of 0.384 was obtained, which means that 38.4% of the variation in work motivation can be explained by work stress and the work environment. This value is also in the weak category, which indicates that the model has a low predictive ability to explain the variables of work motivation.

Overall, these results indicate that although there is a relationship between the variables in the model, further model development is needed taking into account other variables that may have a significant influence on explaining changes in both work motivation and employee performance.

2) Predictive Relevance (Q2)

Predictive Relevance (Q2) aims to assess the predictive ability of the model against each observed indicator. If the value of (Q2) > 0, then the model shows the predictive relevance value and if the value (Q2) < 0, then the model lacks the predictive relevance value.

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The Q2 value of the employee performance variable was 0.329 and the work motivation variable was 0.244. It can be concluded that the model has a good predictive relevance value because the Q2 value > 0.

3) Goodness of Fit (GoF)

Foodness of Fit (GoF) is seen based on the values on the Standardized Root Mean Square Residue (SRMR) table which aims to measure the fit of the model. If the value of GoF is 0.1 then the value is interpreted as small, if GoF is 0.25 then the value is interpreted as moderate, and if the value is GoF 0.36 then the value is interpreted as large.

SRMR GoF value 0.061 . The GoF value of 0.061 is in the large category, which means that this model has an excellent degree of suitability and is able to explain the relationship between latent variables in the study with a strong level of validity.

4) F-Square

F-Square aims to measure how much of an independent construct affects a dependent construct in a structural model.

The measurement results show that the F-Square value of the variable X1 to Y is 0.007, indicating that work stress (X1) has only a very small influence on employee performance (Y). This value is even below the minimum threshold of a small effect according to Cohen. Thus, it can be concluded that in the context of this study, work stress does not make a significant contribution in explaining changes in employee performance. This means that while work stress may occur in the work environment, its impact on overall employee performance is negligible. The F-Square value of X1 to Z of 0.000 indicates that work stress has no effect at all on work motivation (Z). The absence of this contribution suggests that the work stress experienced by employees does not have a significant impact on their level of motivation at work. These findings are interesting, because in many previous studies work stress has often been associated with decreased motivation. However, the results in this study show that work stress is not the dominant factor in determining the high and low work motivation of employees.

The F-Square value of X2 to Y of 0.158 indicates that the work environment (X2) has a moderate influence on employee performance (Y). This means that improvements in the work environment, both in terms of physical, psychological, and relationships between colleagues, can significantly improve employee performance. While not the biggest factor in the model, the work environment still has an important role that cannot be ignored in increasing employee productivity.

The F-Square value of X2 to Z of 0.622 is the highest value in the table, and is in the category of large effects. This indicates that the work environment exerts a very strong influence on work motivation (Z). In other words, when the work environment is perceived positively by employees—for example, comfortable, supportive, and conducive, employee work motivation will increase significantly. These findings reinforce the importance of the role of the work environment in creating psychological conditions that support employees to be more enthusiastic in carrying out their duties and responsibilities.

The F-Square value of Z to Y of 0.206 indicates that work motivation has a moderate influence on employee performance. This makes it clear that work motivation is one of the

important factors that directly impact improving employee performance. When employees are highly motivated, they tend to work harder, focused, and more productively, thus having a positive impact on the work results achieved.

Overall, F-Square's analysis shows that the work environment (X2) is the most dominant construct in this study model, especially in influencing work motivation (Z) with a large effect (F^2 = 0.622), and having a moderate effect on employee performance (Y) (F^2 = 0.158). On the other hand, work motivation (Z) was also shown to contribute significantly to employee performance (Y) with a moderate effect (F^2 = 0.206), suggesting a strong mediating role of motivation in this model.

Meanwhile, work stress (X1) did not have a significant effect on both work motivation and employee performance, which can be seen from the very small to non-existent F-Square values (0.008 and 0.000). These findings indicate that efforts to improve employee performance should be more focused on creating a conducive work environment and providing support to maintain motivation, rather than focusing solely on reducing work stress.

c. **Hypothesis Test**

1) *Direct Effects*

Direct Effects tests for the direct influence of independent variables on dependent variables. The following is a direct influence test on this study.

Table 6. Direct Effect

	Original Sample (O)	Sample Mean (M)	T Statistics	P Values
X1 -> Y	0,054	0,038	0,660	0,509
X1 -> Z	-0,016	-0,021	0,224	0,822
X2 -> Y	0,617	0,617	8,212	0,000
X2 -> Z	0,620	0,627	12,622	0,000
Z -> Y	0,412	0,420	4,340	0,000

Source: Primary Data 2025

H1: Work stress has a positive and significant effect on employee performance

The test results showed that the effect of work stress (X1) on employee performance (Y) had an original sample value of 0.054, with a t-statistics value of 0.660 and a p-value of 0.509. A p-value greater than 0.05 and a t-statistic smaller than 1.96 indicate that the effect of work stress on employee performance is not significant. Thus, H1 was not accepted in this study. This means that although work stress has a positive influence direction, its contribution to employee performance is not statistically proven.

H2: The work environment has a positive and significant effect on employee performance

The results showed that the influence of the work environment (X2) on employee performance (Y) was 0.617 with a t-statistic of 8.212 and a p-value of 0.000. Because the p value < 0.05 and t > 1.96, it can be concluded that the work environment has a positive and significant effect on employee performance. Thus, H2 was accepted in this study. This means that the better the work environment that employees feel, the higher their performance will be.

H3: Work stress has a positive and significant effect on work motivation

The test results showed that work stress (X1) had a coefficient value of - 0.016 to work motivation (Z), with a t-statistic of 0.224 and a p-value of 0.822. This value shows that there is no significant effect between work stress and work motivation. Even the direction of the influence is negative, although it is very small. Thus, H3 was not accepted in this study. This means that work stress does not have a significant impact on employee motivation levels.

H4: The work environment has a positive and significant effect on work motivation

The results of the analysis showed a coefficient value of 0.620, with a t-statistic of 12.622 and a p-value of 0.000. Since the p value is much smaller than 0.05 and t is much greater than 1.96, it can be concluded that the work environment has a positive and very significant influence on work motivation. Thus, H4 was accepted. These findings reinforce that a good and supportive work environment can significantly increase employee work motivation.

H5: Work motivation has a positive and significant effect on employee performance

The results showed that work motivation (Z) had a direct influence on employee performance (Y) with a coefficient value of 0.412, t-statistics of 4.340, and p-value of 0.000. This shows that work motivation positively and significantly affects employee performance, so H5 is accepted. This means that the higher the work motivation of an employee, the higher the performance.

2) Indirect Effects

Indirect effects are carried out to test the indirect influence of an independent variable on dependent variables through intermediate variables. The following is an indirect influence test in this study:

Table 7. Indirect Effects

Influence	Original Sampel	Sample Mean	T- Statistic	P-Values
Work Stress → **Work Motivation →** **Employee Performance**	-0.007	-0.009	0.220	0.826
→ Work Environment **Work Motivation →** **Employee Performance**	0.256	0.264	3.939	0.000

Source: Primary Data 2025

H6: Work motivation positively and significantly mediates the effect of work stress on employee performance

The test results showed that the original sample value was -0.007, with a t-statistic of 0.220 and a p-value of 0.826. A p-value much greater than 0.05 and a t-statistical value much smaller than 1.96 indicate that there is no significant indirect influence of work stress on employee performance through work motivation. In fact, the direction of the influence is negative, although it is very small and insignificant.

Thus, the H6 hypothesis was not accepted in this study. This means that work motivation is not able to be an effective mediator in bridging the influence between work stress and employee

performance. These results are also in line with previous direct effect testing, which showed that work stress had no significant effect on employee motivation or performance.

H7: Work motivation positively and significantly mediates the influence of the work environment on employee performance

The results showed an original sample value of 0.256, with a t-statistic of 3.939 and a p-value of 0.000. Since the p-value is smaller than 0.05 and the t-statistic is greater than 1.96, it can be concluded that the indirect influence of the work environment on employee performance through work motivation is positive and significant.

Thus, the H7 hypothesis is accepted in this study. These results reinforce the important role of work motivation as a mediating variable, which bridges and strengthens the relationship between a good work environment and improved employee performance. This means that when the work environment is well managed and positively perceived by employees, it can increase work motivation, which in turn has a positive impact on their performance.

Statistical descriptive analysis showed that the largest number of respondents were in the male gender, covering 153 respondents with a frequency of 96.84%. This shows that the average worker at UPT Balai Yasa Yogyakarta is mostly male. Meanwhile, the respondent data mostly came from the age group of 31-40 as many as 71 respondents with a frequency of 44.94%. This identifies that respondents range from adults to elderly. In terms of the working group, it is dominated by the Upper Frame group as many as 40 respondents with a frequency of 25.32%. Meanwhile, the majority of the work positions came from implementers as many as 122 respondents with a frequency of 77.36%. These findings show that respondents have been evenly distributed in several work groups even though they are still dominated by the Upper Frame group. Then the focus of this study is how the influence between work stress, work environment, work motivation and employee performance.

1. The effect of work stress on employee performance

The test results showed that the effect of work stress (X1) on employee performance (Y) had an original sample value of 0.054, with a t-statistics value of 0.660 and *a p-value* of 0.509**.** A p-value greater than 0.05 and a t-statistic smaller than 1.96 indicate that the effect of work stress on employee performance is not significant. Thus, H1 was not accepted in this study. This means that although work stress has a positive influence direction, its contribution to employee performance is not statistically proven.

However, the results of this study show that work stress does not have a significant effect on employee performance at UPT Balai Yasa Yogyakarta. This phenomenon can be caused by several factors, including the characteristics of employees who have adaptive abilities and good stress management mechanisms, or the presence of other factors such as work motivation, social support, and work environment that play a more dominant role in performance but are not included in the research model.

Theoretically, according to Robbins & Judge (2008), moderate work stress can serve as a *eustress* which actually motivates employees to work better. However, when stress levels exceed tolerance limits, it will decrease concentration and productivity. This view is in line with the COR

theory which explains that the negative influence of stress on performance can be insignificant if employees have adequate internal and external resources to deal with it. In addition, the Inverted U-Theory put forward by Yerkes and Dodson in (Manullang, 2010) also explains that the relationship between stress and performance is curvillin. Performance will increase as stress increases until it reaches an optimal point, but after passing a certain threshold, the increase in stress actually leads to a decrease in performance. This theory helps explain why some individuals are able to perform better under pressure, while others experience a decline in performance when stress exceeds their adaptive abilities.

In the context of this study, the results of a positive but not significant influence show that employees at UPT Balai Yasa Yogyakarta are able to manage the work pressure they face so that the stress level is still in the eustress category, which is stress that is constructive and spurs motivation. Therefore, even though the work environment at Balai Yasa has various demands such as time targets, physical workload, and high safety responsibilities, these pressures have not hindered performance. Permanent employees are able to consistently maintain the quantity, quality, cost-effectiveness, and independence of their work.

These results are in line with the findings (Alsa & Mirna, 2021) and (Ustati, 2022) which concluded that work stress had no significant effect on employee performance. Both studies confirm that stress is not always a determinant of performance, especially when individuals have strong coping mechanisms or adequate environmental support. Thus, in the context of UPT Balai Yasa Yogyakarta, work stress does not directly reduce performance because most employees are able to adjust to the existing pressures and continue to work productively.

2. The influence of the work environment on employee performance

The results showed that the influence of the work environment (X2) on employee performance (Y) was 0.617 with a t-statistic of 8.212 and a p-value of 0.000. Because the p value < 0.05 and t > 1.96, it can be concluded that the work environment has a positive and significant effect on employee performance. Thus, H2 is accepted. This means that the better the work environment that employees feel, the higher their performance will be.

The results of this study are consistent with the theory of Wahyuningsih & Kirono (2017) which states that a comfortable physical and social work environment can increase work productivity. A good work environment creates a sense of security, increases concentration, and fosters work morale, thus having an impact on more optimal work results. In the context of this study, employees at UPT Balai Yasa Yogyakarta work in environments that have high complexity, such as noise, heavy equipment use, and pressure on occupational safety standards. This condition requires good management of the work environment so as not to cause fatigue or stress that negatively impacts productivity.

The fact that the work environment has a significant effect on performance shows that the comfort of the workspace, lighting, ventilation, and interpersonal relationships between employees are important factors that drive performance at UPT Balai Yasa Yogyakarta. When work facilities are adequate and the work atmosphere is harmonious, employees feel valued, more motivated, and

committed to delivering the best possible results. On the other hand, a less supportive work environment can cause boredom, stress, and decreased work quality.

These results also reinforce the research findings (Septianingsih, 2021) and (Ahmad et al., 2022) which states that the work environment has a positive and significant effect on employee performance. This similarity shows that in various organizational contexts, both in the industrial sector and public services such as UPT Balai Yasa Yogyakarta, a good work environment is the main prerequisite for achieving optimal performance.

Thus, the results of this study confirm that improving employee performance can be done through continuous efforts in creating a safe, clean, organized, and collaborative work culture. This is proof that the management of the work environment is not only a technical aspect, but also part of the strategy to increase productivity and human resource welfare.

3. The effect of work stress on work motivation

The test results showed that work stress (X1) had a coefficient value of -0.016 to work motivation (Z), with a t-statistic of 0.224 and a p-value of 0.822. This value shows that there is no significant effect between work stress and work motivation. Even the direction of the influence is negative, although it is very small. Thus, H3 was not accepted in this study. This means that work stress does not have a significant impact on employee motivation levels.

The results of the study showed that the effect of work stress on work motivation was not significant. These findings suggest that the level of stress experienced by employees in this study was not large enough to affect their internal motivation to work in the workplace. In this study, there was no statistical evidence to suggest that work stress can inhibit or even trigger work motivation, depending on how a person acts on it. This may happen because employees have good coping mechanisms, such as social support in the workplace, work flexibility, or experience dealing with work pressure. As such, the level of stress they experience may not significantly reduce their desire to work. These results are in line with previous research conducted by (Ariman, 2017) and (Novianti, 2016) which shows that the effect of work stress on work motivation is not significant.

4. The influence of the work environment on work motivation

The results of the analysis showed a coefficient value of 0.620, with a t-statistic of 12.622 and a p-value of 0.000. Since the p value is much smaller than 0.05 and t is much greater than 1.96, it can be concluded that the work environment has a positive and very significant influence on work motivation. Thus, H4 was accepted. These findings reinforce that a good and supportive work environment can significantly increase employee work motivation.

The results of the study show that the work environment has a positive and very significant influence on work motivation. This means that when employees have a better work environment, they are more motivated to work. The results show that the work environment can improve morale in addition to offering a supportive workplace. If employees feel physically as well as emotionally comfortable in their workplace, they will be more likely to show a strong passion, responsibility, and commitment to their work. This condition also shows how important management is in creating a harmonious and productive work environment, both through the management of

physical facilities and social relations between fellow employees. Companies that can provide a clean, safe, and healthy working environment can meet their employees' basic needs for a sense of security and value. The results of this study are in line with the research that has been conducted by (Amalia, 2021) and (Matualaga et al., 2024) which states that the work environment has a positive and very significant influence on work motivation.

5. The effect of work motivation on employee performance

The results showed that work motivation (Z) had a direct influence on employee performance (Y) with a coefficient value of 0.412, t-statistics of 4.340, and p-value of 0.000. This shows that work motivation positively and significantly affects employee performance, so H5 is accepted. This means that the higher the work motivation of an employee, the higher the performance.

The results of the study show that work motivation positively and significantly affects employee performance. Therefore, motivation is one of the key factors in determining the success rate of a person's performance at work. Highly motivated employees tend to show more initiative, commitment, and responsibility in completing their tasks. This is reflected in improved quality of work, time efficiency, and the desire to continue to develop professionally. These results are in line with research conducted by (Basyid, 2024), (Armansyah, 2020) and (Agung et al., 2022) which stated that work motivation positively and significantly affects employee performance.

6. Work motivation mediates the influence of work stress on employee performance

The results of the test showed that the original sample value was -0.007, with a t-statistic of 0.220 and a p-value of 0.826. A p-value much greater than 0.05 and a t-statistical value much smaller than 1.96 indicate that there is no significant indirect influence of work stress on employee performance through work motivation. In fact, the direction of the influence is negative, although it is very small and insignificant. Thus, the H6 hypothesis was not accepted in this study. This means that work motivation is not able to be an effective mediator in bridging the influence between work stress and employee performance. These results are also in line with previous direct effect testing, which showed that work stress had no significant effect on employee motivation or performance.

The results of the study showed that work motivation was not significant in mediating the influence of work stress on employee performance. Research shows that work motivation does not have a significant influence on the influence of work stress on employee performance. The results suggest that work motivation can theoretically help turn negative stress into positive motivation. However, there is no statistical evidence to suggest this in this study. The absence of this mediating influence can be caused by many things, such as stress levels that are not high enough to trigger a driving reaction or perhaps because employees' work motivation is more influenced by things outside of work stress, such as awards, promotional opportunities, or their work environment. The results of this study are in line with research that has been conducted by (Salsabila Frisna Zulfi, 2024) which states that work motivation is not significant in mediating the influence of work stress on employee performance.

7. Work motivation mediates the influence of the work environment on employee performance

The results showed an original sample value of 0.256, with a t-statistic of 3.939 and a p-value of 0.000. Since the p-value is smaller than 0.05 and the t-statistic is greater than 1.96, it can be concluded that the indirect influence of the work environment on employee performance through work motivation is positive and significant. Thus, the H7 hypothesis is accepted in this study. These results reinforce the important role of work motivation as a mediating variable, which bridges and strengthens the relationship between a good work environment and improved employee performance. This means that when the work environment is well managed and positively perceived by employees, it can increase work motivation, which in turn has a positive impact on their performance.

The results of the study show that work motivation mediates the influence of the work environment on employee performance positively and significantly. The results show that a good work environment not only improves performance directly, but also increases work motivation indirectly. In this context, work motivation serves as a psychological mechanism that encourages employees to maximize their potential and performance when they are in a comfortable, safe, and valued workplace. This is in line with research that has been conducted by (Septianingsih, 2021) which states that work motivation mediates the influence of the work environment on employee performance positively and significantly.

CONCLUSION

This study concludes that work stress exerts a positive but insignificant effect on employee performance and a negative but insignificant effect on work motivation, failing to support hypotheses of significant influence. In contrast, the work environment demonstrates positive and significant direct effects on both employee performance and work motivation, while work motivation itself positively and significantly impacts performance. Regarding mediation, work motivation does not significantly mediate the job stress–performance link but positively and significantly mediates the work environment–performance relationship, underscoring how conducive conditions boost performance both directly and indirectly via heightened motivation. For future research, scholars could explore longitudinal designs or additional moderators like organizational support to better understand why job stress effects remain insignificant, potentially incorporating diverse sectors beyond UPT Balai Yasa Yogyakarta.

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