Jurnal Teknik Industri: Jurnal Hasil Penelitian dan Karya Ilmiah Dalam Bidang Teknik Industri

Vol. 11, No. 1, 2025

The Influence of Mental Workload and Job Stress on Employee Performance

(Study Case: PT. Sumber Alfaria Trijaya, Tbk)

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ABSTRACT

This study investigates the impact of mental workload and work stress on employee performance in a retail setting, specifically at PT Sumber Alfaria Trijaya, Tbk. A quantitative approach was employed, utilizing questionnaires distributed to employees. The collected data were analyzed using validity and reliability tests, as well as multiple linear regression analysis. The findings indicate that mental workload significantly influences employee performance ($p = 0.020$), whereas work stress does not have a significant effect ($p = 0.962$). However, when examined simultaneously, both variables have a significant combined impact on performance ($F = 10.216$, $p < 0.000$). These results highlight the importance of managing mental workload to enhance employee productivity while ensuring that work stress is controlled to prevent adverse effects on performance. To optimize workforce efficiency, organizations should implement strategies for workload distribution and structured stress management programs. This study provides valuable insights for companies in the retail sector, emphasizing the need for balanced work demands and employee well-being to maintain high performance levels.

Keywords: *Mental Workload, Work Stress, Employee Performance, Retail Industry, Work Environment*

Introduction

Humans or employees are important human resources for companies to facilitate business processes. Employees at Alfamart carry out tasks based on their positions. Cashiers are responsible for processing transactions and serving customers, while sales assistants are responsible for arranging goods and ensuring stock is available. Store Managers monitor store operations and evaluate staff performance, with the help of Supervisors who coordinate teams and resolve issues. Warehouse/logistics workers manage inventory and maintain warehouse cleanliness. Each of these roles is important to ensure the store operates smoothly and provides good service, and each job has its difficulties. Heavy work assigned to individuals must be adjusted or balanced with their physical and mental capacities to avoid fatigue[1].

A company's human resources hold a crucial meaning in achieving a healthy organization. The performance of agile human resources can have a positive impact and bring added value to the company. However, if the employee's work is not good, the company then faces challenges and potential losses in its efforts to achieve its goals [2]. Therefore, effective HR management is the most important key to ensure that every individual in an organization contributes significantly to achieving the company's targets.

According to Utami, quoting from [3] The success of an organization in managing human resources is reflected through the formation of a team with superior quality and performance, which plays an important role in ensuring the ongoing success of the institution in achieving its targets. The ability of an employee to carry out his duties optimally is greatly influenced by the quality of his performance. As a result, individual performance in an organization can have an impact on the overall performance of the institution. However, the quality of performance is greatly influenced by the workload experienced by each employee, physically or mentally.

Workload can be defined as a condition that reflects an operator's inability to complete his tasks [4]. To categorize the performance attributes of each task, it is important to measure workload as a type of effort, which can be adjusted to the worker's abilities or capabilities. According to [5]. Psychological

or mental workload refers to the extent to which an employee uses the resources or abilities required to meet the system's needs. In general, workload can be understood as a mental concept that describes the psychological pressure of performing a particular task under certain environmental and operational conditions. It involves a process of perception and interpretation, which is then compared to the worker's ability or readiness to meet the demands expressed by [6]. Thus, understanding and managing workload effectively is very important to maintain optimal employee performance and support the achievement of company goals.

In the research [7] states, “Employees cannot escape from their workload. In carrying out a job, an employee has the responsibility to complete his/her work”. Companies must comply with government regulations and meet applicable standards [8] However, companies also need to pay more attention to the conditions and performance of their employees to achieve their goals more effectively. In BKN Regulation No. 19 of 2011 on general guidelines for determining civil servant needs, it is explained that workload is an important factor in calculating staffing requirements[9]. Furthermore, according to [10]The work stress variable affects employee performance. Both variables are essential in this study.

According to [11] reveals that Experts' views on employee performance include that employee performance is a layer of individuals who achieve organizational goals through certain indicators. Revealing that performance is the output that employees must achieve can be seen in terms of what employees have done or are doing. Performance is as if it were the result of work or output from workers who have worked hard. Although the performance of each employee is different because of their unique and different experiences and talents, achieving organizational goals is the basis for all employee performance [12]. To achieve optimal performance, companies need to manage employee workloads effectively and make the best use of human resource potential.

To achieve high performance, it is necessary to make maximum work addition efforts by maximizing the potential of existing human resources. This aims to support the final achievement of an organization and provide positive benefits to the progress of the organization [13]. However, Employers must consider the elements that affect employee performance. In this regard, the organization plays an important role in motivating staff members and building a positive working atmosphere that helps them grow into professionals in carrying out their duties in their fields and responsibilities [14]. This shows that optimal performance does not only depend on individual efforts but is also influenced by the supportive environment and organizational policies.

According to [15]. Performance is the overall result of a person during a certain period threshold when performing a task, which is in the form of a standard of work results, targets or goals according to previously established and mutually agreed standards. Many things can affect a person's performance. Therefore, to optimize its influence on company goals, businesses must pay attention to these elements.

Previous research conducted by [16] claims that employee performance is somewhat disturbed by stress and work-related busyness. Then, according to previous research according to (Agripa Toar Sitepu) "The Effect of Workload and Motivation on Employee Performance at PT. Bank Tabungan Negara Tbk Manado Branch". states that employee performance is not influenced by workload. Employee performance is influenced by motivation, and according to [6] Work pressure hurts employee performance, so job satisfaction has a positive effect on employee performance.

PT Sumber Alfaria Trijaya, Tbk was founded in 1989 by Djoko Susanto, a cigarette businessman based in Jakarta. After dozens of years in the cigarette business, this company established a group of grocery stores called Alfamart in 1999. Currently, Alfamart has 10,666 stores, of which 7,596 are self-owned and 3,070 are franchise stores. The outlets are located in various regions such as Jakarta, Cileung, Tangerang, Cikarang and other big cities. Along with the rapid expansion and development of the company, challenges related to mental workload and employee performance are increasingly becoming the focus of attention in company management.

Although previous studies have examined the impact of workload and stress on performance, research specifically exploring these factors in Indonesia’s retail sector remains limited. This study aims to fill that gap by analyzing the case of PT Sumber Alfaria Trijaya, Tbk, particularly in understanding the effects of mental workload on employee performance. The mental workload at Alfamart increases due to the pressure to meet sales targets, serve customers quickly, and maintain store cleanliness and product availability despite limited resources. Additionally, employees face complex multitasking demands, such as handling customer complaints, managing inventory, and ensuring smooth store operations—often with long working hours and limited break time. These conditions not only lead to mental and emotional exhaustion but also contribute to higher employee turnover rates. Furthermore, employees with high mental workloads tend to experience decreased productivity, delays in task completion, and difficulties in achieving daily targets, ultimately impacting the company’s overall performance.

According to [17], Customer service quality is also affected, with employees becoming less friendly, less patient, and making more mistakes, which ultimately impacts customer satisfaction [18]. Retail employees often experience high work stress and mental workload due to multitasking and customer service expectations. If not managed properly, this can lead to fatigue, reduced efficiency, and high employee turnover. An important risk that is often experienced by Alfamart cashiers is a lack of cash. Despite having tried hard to ensure that the cash is by the system, there is still often a shortage when physically counting the money. This problem is often experienced by most cashiers, especially those who are new to the job. The causes of cash shortages vary, but every Alfamart cashier has faced this problem, such as the mistake of giving change to customers or the store manager taking goods without paying.

Workload can be divided into several dimensions, namely: time pressure, which reflects the duration available to plan, implement and monitor tasks, including work time standards and rest time; mental effort load, which is related to the amount of pressure on tasks to be completed, the amount of work, the amount of responsibility, the level of difficulty, and the risks involved; and psychological stress load, which describes confusion, frustration, and the level of concentration in doing work, whether focused or not, which can affect the achievement of goals. Human resource planning is a process that must be carried out to prepare for future employee needs based on future business demands and environmental conditions. Nawawi said that HR planning is a process of determining strategies to obtain, use, develop and maintain human resources that must be effective and in line with the current company and for future developments [19].

In conclusion, workload can be said that workload can be measured based on time, mental and psychological pressure that affects various aspects of work. Human resource planning focuses on methods to meet employee needs and manage personnel issues in line with current and future organizational needs.

Mental workload refers to the gap between work on a handful of commands and the individual's maximum ability. Too much mental workload can cause work stress. Work stress occurs due to events in a work environment that may be dangerous and threatening, such as feelings of anxiety, fear, sadness, or boredom. Such tension arises when the workload that is found to exceed work capacity is met in a relatively long time, in any condition or situation. A person's ability to work is influenced by work practices, physical conditions, training and health (Sugiono). Ergonomics researchers assume that brain activity can be measured mathematically, and the results can be used to determine the extent of the non-physical load felt by an operator. Thus, a work mechanism can be created so that the mental load remains stable, not too light, which causes boredom, but also not too excessive, which can reduce performance [20].

In conclusion, mental workload is the difference between task demands and an individual's maximum capacity, where excessive workload can cause work stress. This stress arises from various threats or pressures that exceed a person's work capacity over a long period. Work capacity is influenced by work methods, physical condition, training, and health. Ergonomics research shows that mental processes can be assessed quantitatively to design work systems that maintain mental load at an optimal level, avoiding boredom or decreased performance.

Work stress is a condition in which a person feels stress or tension due to various factors in the work environment, so that it can harm the health of the body and mind as well as employee performance. According to [21], Job stress is a place within oneself caused by social, environmental, and physical demands that can be risky and beyond a person's control. Research [22] shows that work stress can cause an imbalance between job demands and a person's ability to cope with them, which ultimately affects employee performance.

In addition, research [23] found that the main factors causing work stress were excessive workload, time pressure, and poor supervision. Previous studies by [24] found that factors such as age, gender, and tenure also affect work stress, with older employees and some who have longer working hours tending to experience more stress. The effects of work stress include decreased productivity, increased absenteeism, and increased risk of workplace accidents.

The statistical method used to test the relationship between one or more independent variables and a categorical dependent variable is called logistic regression. This approach is often used in various fields of study, such as health, economics, and the social sciences. One use of logistic regression is to identify the types of factors that affect students' cumulative academic achievement averages (GPA). Research [23] used binomial logistic regression to analyze the types that affect the GPA of FMIPA students at one of the universities in Indonesia. The research findings indicate that gender, major and place of residence have a significant effect on student grades. In addition, logistic regression was also applied to model the types that affect poverty in Indonesia. Research by [25] income has a significant

effect on poverty levels. Logistic regression is also applied in health research to predict disease risk. For example, research by [24] used logistic regression to predict the risk of diabetes based on factors such as age, weight, and family history.

A. Employee Performance

Performance is what employees do when they complete tasks according to their obligations, both in terms of quantity and quality [26]. Performance reflects an individual's efforts during the execution of tasks and completing them according to their workload, with the desired results, or the achievements achieved by activities carried out by individuals or groups in an organization that respect their rights and obligations to achieve organizational goals successfully while still complying with laws, standards, and ethics. Suntoro expressed the success that can be achieved by individuals or groups in an organization to achieve organizational goals within a predetermined time prospect.

In conclusion, performance is a measure of work results that reflect the quality and quantity of an employee's task achievement according to their obligations and authorities. Performance describes success in carrying out work to achieve organizational goals, taking into account legal, moral, and ethical aspects. Various definitions indicate that performance can be measured based on work results in a certain period and the level of task achievement, and is related to quality, efficiency, and effectiveness in the organization.

Research Methods

This study employs a quantitative approach using a survey method to analyze the influence of mental workload and work stress on employee performance at PT Sumber Alfaria Trijaya, Tbk. This method was chosen because it allows for the quantification of relationships between the studied variables and enables statistical hypothesis testing.

The population in this study consists of all employees of PT Sumber Alfaria Trijaya, Tbk located in Tegalwaru District, totaling 36 employees. Although the sample size is limited to 36 employees, a saturated sampling approach was used to ensure the inclusion of all employees at the research site. This technique was selected to enhance the validity of the study and ensure that the findings accurately represent the characteristics of the entire population.

Data was collected through a questionnaire designed based on the indicators of the research variables. The questionnaire consisted of statements measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Additionally, brief interviews were conducted with several respondents to gain deeper insights into the factors influencing work stress and mental workload within the company. To analyze the data, SPSS 26 software was used, following these analytical steps:

1. **Validity and Reliability Testing**
   - Validity was tested using the Pearson Product-Moment correlation technique to ensure that each questionnaire item accurately measured the intended variable.
   - Reliability was tested using Cronbach's Alpha, with a value > 0.70 indicating that the research instrument was consistent in measuring the research variables.
2. **Classical Assumption Testing**
   - **Normality Test** (Kolmogorov-Smirnov) to ensure that the data follows a normal distribution.
   - **Multicollinearity Test** to check for high correlations among independent variables by examining the VIF (< 10) and Tolerance (> 0.1) values.
   - **Heteroscedasticity Test** using the Scatterplot method to ensure that independent variables do not have systematic residual variability.
3. **Multiple Linear Regression Analysis**

   Multiple linear regression was used in this study as it allows for the simultaneous analysis of the influence of two or more independent variables on a dependent variable. In this context, multiple linear regression was applied to assess how mental workload and work stress collectively affect employee performance, providing a more comprehensive understanding compared to single-variable analysis [27].
   - The regression model used [28].

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e \quad (1)$$

Where:

Y = Employee performance

X1 = Mental workload
X2 = Work stress
$\beta 0$ = Constant (intercept)
$\beta 1,2$ = Regression coefficients for each independent variable
e = Error (residual)

- The t-test is used to examine the effect of each independent variable on the dependent variable.
- The coefficient of determination (R^2) is calculated to determine the extent to which the independent variables explain the variability of the dependent variable.
- The F-test, which evaluates the significance level of the simultaneous influence of independent factors on the dependent variable, is the hypothesis test used in this study [29] to assess the overall effect of X on Y.

The decision-making criteria [30] are based on the significance probability value, which is:

a. If the probability of significance > 0.05, then Ho is accepted and Ha is rejected.
b. If the probability of significance < 0.05, then Ho is rejected and Ha is accepted

Table 1. Population Description

Total Percentage Variable of Gender		
Male	18	50%
Female	18	50%
Age		
18-20		15
21-23		6
24-27		6
27-29		5
>30		4
Working Hours		
1-5		12
5-10		14
10-15		10
Last Education		
High School		36

Mental Workload Indicator

Table 2. Mental Workload Indicators

Rating description	Scale	Description
Mental Demand (PM)	Low. High	How much mental and perceptual activity is required to see, remember, and search? Is the job easy or difficult, simple or complex, loose or tight?
Physical Demand (PQ)	Low. High	The amount of physical activity required to (e.g., push, pull, control rotation, etc.)
Time Demand (TQ)	Low. High	The amount of time-related stress felt during the job elements. Is the work slow or relaxed or fast and tiring?
Performance (P)	Inaccurate, Perfect	How successful a person is at their job and how satisfied they are with their work
Effort Level (EF)	Low. High	How much mental and physical effort is required to complete the job
Frustration Level (TF)	Low. High	How insecure, discouraged, irritated, and annoyed one feels compared to feelings of security, satisfaction, comfort, and self-satisfaction are felt

Job Stress Indicators

Table 3. Job Stress Indicators

Job Stress Indicators	Description
Time Pressure	Demands to complete work in a very short time.
Lack of Support from Superiors	Not getting enough support or attention from superiors.
Unsafe/Uncomfortable Work Environment	Poor physical conditions of the workplace.
Lack of Appreciation	Efforts and contributions are not appreciated or recognized.
Imbalance Between Authority and Responsibility	Responsibilities given are not commensurate with the authority held.
Role Ambiguity	Not having a clear understanding of what is expected in the job.

Performance Indicators

Employee performance indicators are as follows:

1. Quality of work: How successfully a worker completes a given task.
2. Quantity of work: The amount of time a worker spends throughout the workday. The speed at which each employee completes his or her task indicates the amount of this work.
3. Execution of tasks: The extent to which workers can do their jobs correctly or without errors.
4. Responsibility: Understanding that he or she must complete his or her tasks correctly and without errors.

The following diagram in Figure 1 illustrates the important stages in the research process, from planning to reporting results. Each step, from determining the research locus, identifying problems, reviewing literature, designing research, developing instruments, to collecting and analyzing data, as well as the results and discussion, is carried out sequentially and carefully. In addition, the data analysis stage also includes validity tests, reliability tests, normality tests, heteroscedasticity tests, multicollinearity tests, and F tests. By following this procedure, research can be carried out systematically and produce valid and accountable findings.

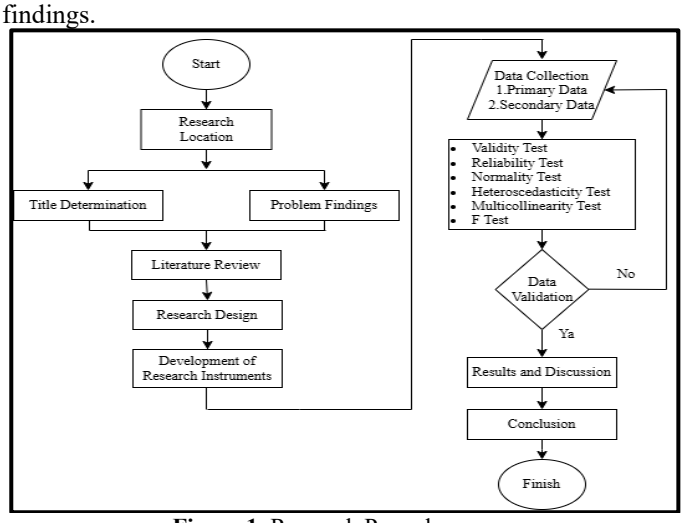

Figure 1. Research Procedure

The research begins with planning and preparation, followed by determining the relevant research location. After that, the title and research problem are determined, followed by a literature review to understand the context and formulate a hypothesis. The researcher then designs the methodology and selects the method, sample, and data collection instruments. These instruments are developed and tested for validity and reliability. Data are collected and analyzed, followed by validity tests, reliability tests, normality tests, heteroscedasticity tests, multicollinearity tests, and F tests to ensure data accuracy and consistency. The research results are then presented and discussed in the context of existing literature before finally being concluded and reported for publication or submission.

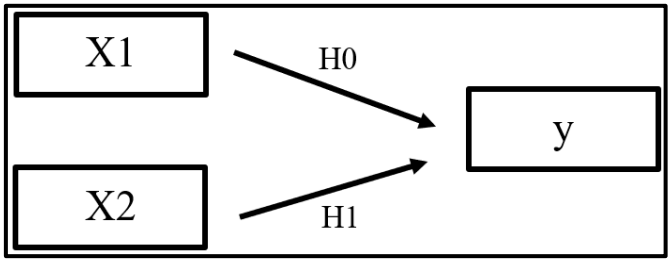

Figure 2. Diagram Hipotesis

This Figure 2 diagram illustrates the statistical analysis process in a study using the F test to determine how independent factors affect the dependent variable. In this context, the independent variables are represented by X1 (mental workload) and X2 (job stress), each of which affects the dependent variable y (employee performance). The degree of significance of the combined impact of these independent variables on y at the same time is evaluated using the F test. The decision-making process is based on the probability of significance figures calculated through the F test. According to [30]. If the probability of significance is greater than 0.05, then the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected. Conversely, if the probability of significance is less than 0.05, then the null hypothesis (Ho) is rejected, and the alternative hypothesis (Ha) is accepted. This diagram makes it easier to understand how various variables interact and how statistical testing can be used to assess these influences in a research context.

Results And Discussion

PT. Sumber Alfaria Trijaya, Tbk. In Tegalwaru District, the community's shopping place is located in Wargasetra Village, Tegalwaru District, Karawang Regency. PT. Sumber Alfaria Trijaya, Tbk has 36 employees in Tegalwaru District. Based on the research results, data validation results were obtained with a total of 36 respondents, df = n -2 = 34 (r table 0.584) stated that all question item variables were valid.

Validity Test

Table 4. Correlation Value of Mental Workload Items (X1)

Indicator	R- Table	R- Calculation	Description
X1.1	0.344	0.584	VALID
X1.2	0.344	0.632	VALID
X1.3	0.344	0.725	VALID
X1.4	0.344	0.753	VALID
X1.5	0.344	0.663	VALID
X1.6	0.344	0.802	VALID
X1.7	0.344	0.831	VALID
X1.8	0.344	0.752	VALID
X1.9	0.344	0.768	VALID
X1.10	0.344	0.453	VALID

Since the calculated r value is greater than 0.344, it can be concluded from the table above that each question related to the workload variable (X1) is considered valid. As a result, all data for variable X1 are reliable and suitable for additional testing.

Table 5. Correlation Value of Mental Workload Items (X2)

Indicator	R- Table	R- Calculation	Description
X2.1	0.344	0.707	VALID
X2.2	0.344	0.809	VALID

X2.3	0.344	0.628	VALID
X2.4	0.344	0.768	VALID
X2.5	0.344	0.893	VALID
X2.6	0.344	0.842	VALID
X2.7	0.344	0.78	VALID
X2.8	0.344	0.891	VALID
X2.9	0.344	0.864	VALID
X2.10	0.344	0.848	VALID

Given that the calculated r value is greater than 0.344, it can be concluded from the table above that each question related to the work stress variable (X2) is considered valid. As a result, all data on the X2 variable are valid and suitable for additional testing.

Table 6. Correlation Values of Employee Performance Instrument Items (Y)

Indicator	R- Table	R- Calculation	Description
Y1.1	0.344	0.579	VALID
Y1.2	0.344	0.5	VALID
Y1.3	0.344	0.557	VALID
Y1.4	0.344	0.485	VALID
Y1.5	0.344	0.702	VALID
Y1.6	0.344	0.557	VALID
Y1.7	0.344	0.453	VALID
Y1.8	0.344	0.434	VALID
Y1.9	0.344	0.574	VALID
Y1.10	0.344	0.439	VALID

Since the calculated r value is greater than 0.344, it can be concluded from the table above that every question related to the employee performance variable (Y) is considered valid. As a result, all Y variable data are reliable and suitable for additional analysis.

Reliability Test

The purpose of reliability testing is to assess how consistently the instrument measures the desired idea. One of the prerequisites for establishing the validity of a questionnaire created for a specific purpose is reliability. Cronbach's Alpha method is used to measure dependability. The questionnaire responses from respondents are considered reliable if Cronbach's Alpha score is higher than 0.70. Conversely, the responses from respondents are considered unreliable if Cronbach's Alpha value is less than 0.7.

Table 7. Reliability Value (Each Question Item)

Question Item	Cronbach's Alpha	Description
Mental Workload	0.883	Reliable
Work Stress	0.939	Reliable
Employee Performance	0.715	Reliable

It is clear from the previous table, which summarizes the findings of the reliability test, that the Cronbach Alpha value of each variable is more than 0.70. To use it in additional studies, this seeks to ensure that all research tools can be considered trustworthy or reliable. In other words, even when used in different models or designs and periods, this questionnaire produces consistent measurements.

Normality Test

Using the Unstandardized Residual Kolmogorov-Smirnov technique, this test is conducted to ensure whether the regression model, independent variables, and dependent variables all follow a normal

distribution. If the significance value (sig.) is more than 0.05, the data is considered to be regularly distributed.

Table 8. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
N		**36**
Normal Parameters	Mean	0
	Std. Deviation	4.82258799
Most Extreme Differences	Absolute	0.116
	Positive	0.116
	Negative	-0.08
Test Statistic		0.116
Asymp. Sig. (2-tailed)		0.2

The significance value is higher than the threshold of 0.05 (0.200 > 0.05). Therefore, the data used in this study can be said to be regularly distributed.

Heteroscedasticity Test

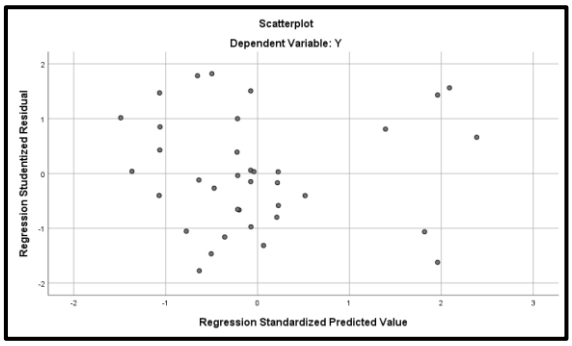

Figure 3. Heteroscedasticity Test Results

From the test results above, it can be seen that there is no regular pattern in the distribution of data points (for example, wavy or widening and then narrowing). In addition to being grouped up and down, the data points are also spread around 0 or above and below the Y axis, therefore, it can be concluded that the multiple regression analysis in this article is neutral.

Multicollinearity Test

Table 9. Multicollinearity Test Results

Model	Variable	Tolerance	VIF
1	X1	0.305	3.282
	X2	0.305	3.282

The variance inflation factor (VIF) value of 3.282 for the work stress variable (X2) and the mental workload variable (X1) is smaller than the lower limit of 10.00, and the tolerance value of 0.305 is greater than the lower limit of 0.100, according to the test results table above. Therefore, it can be said that there are no symptoms of multicollinearity in the regression model used in this study.

Multiple Linear Regression Analysis

Table 10. Results of Multiple Linear Regression Analysis

Model	Variabel	B	Std. Error	Standardized Coefficients (Beta)	t	Sig.
1	Y	14.163	2.993	-	4.731	0
	X1	0.538	0.219	0.608	2.455	0.02
	X2	0.009	0.194	0.012	0.048	0.962

Based on the management in the table above, the results of the linear regression equation are: employee performance = 14,163 + mental workload = 0.538 + work stress = 0.009 + e.

a. The mental workload variable (X1) has a significant effect on employee performance (Y), as indicated by the test significance value with a value of 0.020, which is smaller than the threshold of 0.05. In addition, the analysis shows that the t-count value has a value of 2.455, which is higher than the t-table value with a value of 1.692. These results confirm that the mental workload variable (X1) has a significant impact on employee performance (Y) individually, which shows that the mental workload received by employees affects their performance in the workplace directly and significantly.
b. Testing the effect of the work stress variable (X2) on employee performance (Y) produces a significance value with value of 0.962, which exceeds the significance threshold of 0.05. This shows that the work stress variable (X2) has no significant effect on employee performance (Y). In addition, further analysis shows that the t-count value with a value of -0.048 is smaller than the t-table value with a value of 1.692. Thus, it can be concluded that the work stress variable (X2) does not have a significant impact on employee performance (Y). This finding confirms that in the context of this study, work stress has no substantial influence on employee performance.
c. The significance of the effect of mental workload (p = 0.020) indicates that a moderate level of mental workload and cognitive engagement can enhance employee performance. However, excessive mental workload may lead to fatigue, negatively impacting productivity.

F Test

Table 11. F Test Results

Model	Source of Variation	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	503.993	2	251.996	10.216	0
	Residual	814.007	33	24.667	-	-
	Total	1318	35	-	-	-

Based on the output obtained, the F-count value is 10.216 with a significance level of 0.000 <0.005. With this F-count value exceeding the F-table value (10.216 > 3.28), so it can be concluded that simultaneously, there is a significant influence of compensation and work environment on employee performance.

Discussion and Comparison with Previous Studies

The results of this study are compared with previous research to strengthen the existing theories. For instance, a study by [31] indicated that work stress and mental workload have a significant impact on employee performance in the retail industry, which aligns with the findings of this study. Additionally, research by [32] also found that workload significantly affects productivity. Similarly, [6] confirmed that mental workload influences employee performance.

However, the findings of this study contradict those of [2], who reported that mental workload does not have a significant effect on employee performance. Furthermore, a study by [33] al.. indicated that work stress negatively affects employee performance, differing from the findings of this research, which show that work stress does not have a significant impact.

Thus, this study contributes to enriching the understanding of factors influencing employee performance, particularly in the retail industry. The differences and similarities with previous studies provide additional insights into how mental workload and work stress affect employee productivity in different work environments. Through a systematic research design and the application of a comprehensive analytical method, this study aims to produce valid results and serve as a reference for understanding employee performance dynamics in the retail sector.

Conclusion

The results of this study indicate that mental workload has a significant impact on employee performance (p = 0.020), as evidenced by a t-value of 2.685, which is greater than the t-table value of 1.692. This finding confirms that mental workload is one of the key factors influencing employee performance improvement. Conversely, work stress does not have a significant effect on performance,

as indicated by a significance value of 0.962, which is greater than 0.05, and a t-value of -0.048, which is lower than the t-table value of 1.692. However, when both factors are analyzed simultaneously, it is evident that mental workload and work stress together influence employee performance, as demonstrated by an F-value of 10.216 with $p < 0.000$.

Based on these findings, companies are advised to develop training programs that help employees effectively manage cognitive demands, thereby enhancing productivity without increasing excessive psychological pressure. Additionally, stress management interventions should focus on strengthening employees' psychological resilience rather than merely reducing workload, ensuring they are more adaptive to workplace pressures.

For future research, it is recommended that similar studies involve a larger sample from various retail organizations to provide a broader understanding of industry trends. Furthermore, exploring moderating factors such as leadership style or employee engagement levels could offer deeper insights into how these variables interact and contribute to employee performance in the retail sector.

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