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# The Effect of Workload and Work Stress on Employee Performance Mediated by Job Satisfaction: An Empirical Study of Employees of The Indonesian Aviation Academy (API) Banyuwangi

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#### **Abstract**

This research is motivated by the problem of stagnant employee performance at the Indonesian Aviation Academy (API) Banyuwangi, influenced by an unbalanced workload and high levels of job stress. This condition has resulted in decreased productivity and performance accountability, which are mostly in the adequate category. Job satisfaction is suspected to be an important mediating variable in the relationship between workload, job stress, and employee performance, so empirical research is needed to find appropriate managerial solutions. The research method uses a quantitative approach with an explanatory research design. The independent variables in this study include workload (X1) and work stress (X2), while the mediating variable is job satisfaction (Y1) and the dependent variable is employee performance (Y2). Data were obtained through distributing questionnaires to employees of the Indonesian Aviation Academy (API) Banyuwangi using a purposive sampling technique, then analyzed to test the relationship between variables and the mediating role of job satisfaction. The research findings are expected to contribute both theoretically and practically. Theoretically, this study enriches human resource management studies related to the influence of workload and job stress on performance by considering the mediating role of job satisfaction. Practically, the findings of this study can serve as a reference for the management of the Indonesian Aviation Academy (API) Banyuwangi in formulating strategic policies, particularly in creating a balanced work environment, reducing stress levels, and increasing employee job satisfaction to encourage more optimal performance.

Keywords: Workload, Job Stress, Employee Performance, Indonesian Aviation Academy (API) Banyuwangi

### 1. INTRODUCTION

Every company or organization faced with the ever-changing globalization environment, including government organizations, must be able to compete and provide the best service to the public. This creates higher demands on the workforce, such as mastery of new technologies, busy work schedules, and strict organizational regulations. These conditions can cause excessive psychological stress for employees in carrying out their duties (Agustina, 2022). If employees cannot manage this, it will impact the quality of their performance. The challenges faced by the Indonesian Aviation Academy (API)

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Banyuwangi have been the focus of in-depth research. A deeper analysis of field conditions revealed that employees face an unbalanced workload and psychological stress that significantly impact their performance (Ahyar, 2020). This condition is reflected in the annual performance assessment, which shows stagnation in performance accountability, except in 2022 when there was an increase to a good predicate before declining again in 2023. Unbalanced workloads have become a key issue in evaluating the performance of employees at the Indonesian Aviation Academy (API) Banyuwangi. Workload, which reflects the average activity level at work over a specific timeframe, creates psychological stress that limits employees' ability to fulfill their duties and responsibilities (Arikunto, 2016). This is further exacerbated by work stress, which can affect employees' emotions, thought processes, and well-being. Observations of employees at the Indonesian Aviation Academy (API) Banyuwangi show variations in workloads and stress levels depending on their respective fields of work. A heavy or light workload can lead to inefficient performance. Furthermore, high levels of stress can negatively impact a person's ability to handle tasks and improve work performance (Arisanti, 2023). The critical challenges faced by employees at the Indonesian Aviation Academy (API) illustrate the complex nature of workloads, job stress, and their impact on performance. An unbalanced workload causes psychological stress among employees, limiting their ability to optimally carry out their duties and responsibilities (Aristyanto, 2019). Over time, heavy workloads can reduce productivity and performance quality.

Therefore, it is important to consider the variable of job satisfaction in a deeper understanding of the factors influencing employee performance at the Indonesian Aviation Academy (API), Banyuwangi. Job satisfaction's ability to mediate the relationship between workload, stress, and performance provides a more comprehensive picture of workplace dynamics (Askani & Salehan, 2022). This variable enriches our understanding of the ways in which workload and stress can affect performance, as well as the role of job satisfaction in mediating or mitigating the negative impact of these factors. Therefore, a deeper understanding of the role of job satisfaction can pave the way for more effective strategies and solutions to improve employee well-being and productivity at the Indonesian Aviation Academy (API) (Baha'udin, M., & Nurhidayati, 2022). The conditions at the Indonesian Aviation Academy (API) compared to research elsewhere regarding the same variables as the Research Gap are as: Research Gap has no intervening variables in accordance with previous research. Bestari (2021), the influence of workload and work stress through job satisfaction on employee performance in the BP2MI protection unit with the following conclusions: (1) this finding explains that workload has a positive effect on job satisfaction; (2) this finding explains that work stress has a positive effect on job satisfaction; (3) this finding explains that workload has a positive effect on employee performance; (4) this finding explains that work stress has a negative effect on employee performance; and (5) this finding explains that job satisfaction has a positive effect on employee performance. I.S Wulandari, et al (2022), The influence of workload and work stress through the mediation variable of job satisfaction on employee performance at PNM Mekaar Area Batang 2 with the conclusion: (1) workload influences employee job satisfaction; (2) Job stress influences employee job satisfaction; (3) job satisfaction influences employee performance; (4) workload does not influence employee performance; (5) work stress does not influence employee performance; (6) workload does not influence employee performance; (7) work stress influences employee performance. Because of the problems that exist at the Indonesian Aviation Academy (API) and the gaps in this research gap, the researcher is interested in conducting a study entitled "The Effect of Workload and Work Stress on Employee Performance Mediated by Job Satisfaction: An Empirical Study of Employees at the Indonesian Aviation Academy (API) Banyuwangi.

### 2. METHOD

This study uses explanatory research to determine the effect of workload and work stress on employee performance mediated by job satisfaction in an empirical study of employees at the Indonesian Aviation Academy (API). To conduct this research, researchers required two types of data: primary and secondary. Primary data were obtained through interviews with informants relevant to the research problem and through direct observation of the research objects at the research location. Secondary data were obtained through information searches of references or literature related to the research problem, as well as through library research, which included literature, magazines, and written works relevant to the problem being studied.

### 3. RESULTS AND DISCUSSION

# **Respondent Characteristics**

After distributing the questionnaires, data were collected from 50 respondents. These data were then analyzed based on respondent characteristics to provide deeper insights into the study.

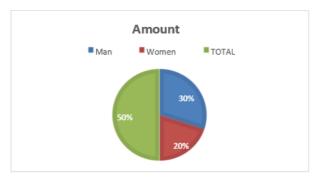


Figure 1. Respondent Characteristics Based on Gender

Based on Figure 1, it can be concluded that the characteristics of respondents are based on gender, there are 30 people who are male or 60%, while 20 people are female or 40% with a total of 50 respondents. Based on these data, it can be concluded that the majority of respondents were male (30 respondents 60%).



Figure 2. Respondent Characteristics Based on Position

Based on Figure 2, it can be concluded that the correspondence consists of 25 people from PNS positions (consisting of Co Pilot, Lecturer, Reviewer, Unit Head, Assistant, etc.) with the highest percentage of 50%, PPPK 2025 employees (consisting of Service Administrator, General Practitioner, Operator, etc.) of nine people with a percentage of 18%, non-permanent employees (consisting of dentist, technician, receptionist, etc.) of five people with a percentage of 10%, cadet caregivers of three people with a percentage of 6%, Non-PNS Absenteeism (consisting of security, gardener, CS, staff, etc.) of eight people (16%).

# **Validity Test**

The validity of the questionnaire was assessed through a validity test. Before determining all the indicators of a statement's suitability as a research tool, a test was conducted on a large sample. If the 5% significance level is reached and the calculated r is greater than the table r, the statement is considered valid. If the calculated r is less than table r, the statement is considered invalid. The results of the validity test are as follows:

Table 1. Validity Test

Variable	Item	R Count	R	Information
			Table	
Workload	X1.1	0,507	0,2732	VALID
	X1.2	0,577		VALID
	X1.3	0,493		VALID
	X1.4	0,524		VALID
	X1.5	0,450		VALID
	X1.6	0,598		VALID
	X1.7	0,663		VALID
	X1.8	0,639		VALID
	X1.9	0,604		VALID
Work Stress	X2.1	0,579	0,2732	VALID
	X2.2	0,476		VALID
	X2.3	0,592		VALID
	X2.4	0,538		VALID
	X2.5	0,565		VALID

Variable	Item	R Count	R	Information
			Table	
	X2.6	0,585		VALID
	X2.7	0,563		VALID
	X2.8	0,517		VALID
	X2.9	0,547		VALID
	X2.1	0,518		VALID
	0			
Job satisfaction	Y1.1	0,629	0,2732	VALID
	Y1.2	0,547		VALID
	Y1.3	0,676		VALID
	Y1.4	0,537		VALID
	Y1.5	0,558		VALID
	Y1.6	0,661		VALID
	Y1.7	0,594		VALID
	Y1.8	0,612		VALID
Employee	Y2.1	0,627	0,2732	VALID
performance				
	Y2.2	0,546		VALID
	Y2.3	0,678		VALID
	Y2.4	0,539		VALID
	Y2.5	0,532		VALID
	Y2.6	0,653		VALID
	Y2.7	0,610		VALID

Based on the table above, the validity evaluation results indicate that all variable statements submitted to the respondents are valid. This is because the calculated r value is greater than the table r value (0.2732), thus concluding that all statements in the questionnaire can be considered suitable instruments for measuring research data. All the indicators or questions used in this study can be considered valid because they can measure concepts or variables accurately and consistently.

### **Reliability Test**

Reliability testing was conducted to evaluate how consistently the measurement instruments depended on each other. In this study, reliability testing was conducted after all the statement variables were deemed suitable for use as research instruments. A statement was considered reliable if its Cronbach's alpha value was greater 0.6. The results of the reliability test are as follows:

Table 2. Reliability Test Results

Variable	Cronbach's Alpha	Information	
Workload ( X1)	0,727	Reliabel	
Work Stress (X2)	0,721	Reliabel	
Job satisfaction ( Y1)	0,708	Reliabel	
Employee Performance	0,760	Reliabel	
(Y2)			

# **Regression Test Results**

# Coefficients a

Unstandardize	d Coefficients	Standardized Coefficients		
В	Std. Error	Beta	t	Sig.
-1.022	4.464		229	.820
.290	.102	.256	2.857	.006
.564	.068	.742	8.278	<.001

**Figure 3.** Regression Test Results

Based on the results of multiple linear regression, the following regression equation was obtained:

Job Satisfaction = -1.022 + 0.290 (Workload) + 0.564 (Job Stress)

- 1. The workload variable had a regression coefficient of 0.290 with a significance level of 0.006 < 0.05. This indicates that workload has a positive and significant effect on employees' job satisfaction. In other words, a well-distributed workload can increase employee satisfaction with their work.
- 2. The work stress variable had a regression coefficient of 0.564 with a significance level of < 0.001. This means that work stress had a positive and significant effect on job satisfaction. These results indicate that employee stress is still within the normal range (eustress), thus encouraging employees to feel more satisfied with completing their work.
- 3. The constant of -1.022 is not significant and therefore does not have a significant impact on the model.

### 4. CONCLUSIONS

Based on the results of the data analysis and discussion in the previous section, the following conclusions can be drawn:

1. Workload on Job Satisfaction

Workload did not have a significant effect on job satisfaction. This indicates that the workload level does not directly determine the level of employee job satisfaction.

# 2. Job Stress on Job Satisfaction

Job stress had a significant negative effect on job satisfaction. The higher the level of work stress experienced by employees, the lower is their level of job satisfaction.

# 3. Workload and Job Stress on Employee Performance

Neither workload nor job stress has a significant effect on employee performance. This means that employee performance is not solely determined by the workload or stress they experience.

# 4. Job Satisfaction on Employee Performance

Job satisfaction had a positive and significant effect on employee performance. The higher the job satisfaction experienced by employees, the higher is their performance.

# 5. The Mediating Role of Job Satisfaction

Job satisfaction acted as a mediating variable in the relationship between job stress and employee performance. Work stress does not directly reduce performance but reduces job satisfaction, which ultimately impacts employee performance.

# 5. ACKNOWLEDGE

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# 6. REFERENCE

- Agustina, Menik Tetha & Safitri, C. M. T. (2022). STRES KERJA: PENYEBAB, DAMPAK DAN SOLUSINYA. Jurnal Pendidikan Sultan Agung, 2(2), 187–196. https://doi.org/http://dx.doi.org/10.30659/jp-sa.v2i2.21066
- Ahyar, H., Maret, U. S., Andriani, H., Sukmana, D. J., & Mada, U. G. (2020). Buku Metode Penelitian Kualitatif & Kuantitatif (Issue April).
- Arikunto, S. (2016). Prosedur Penelitian Suatu Pendekatan Praktik. Rineka Cipta.
- Arisanti, D., & Kusumayadi, F. . (2023). PENGARUH STRES KERJA DAN BEBAN KERJA KERJA TERHADAP KEPUASAN KERJA KARYAWAN PADA PT. PLN TARAKAN MITRA PT. PLN (PERSERO) ULP WOHA. Jurnal Riset Manajemen Dan Akuntansi, 3(2), 01–10. https://doi.org/https://doi.org/10.55606/jurima.v3i2.2141
- Aristyanto, E., Nanda, A. S., & Hasan, A. F. (2019). Pengaruh Komitmen dan Kepercayaan terhadap Kepuasan Nasabah Bank Syariah di Surabaya. Perisai : Islamic Banking and Finance Journal, 3(1), 1–18. https://doi.org/10.21070/perisai.v3i1.1981
- Askani & Salehan. (2022). Kinerja Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu (DPM-PTSP) Dalam Memberikan Pelayanan Izin Mendirikan Bangunan (IMB) Kota Bengkulu. JURNAL STIA BENGKULU: Committe to Administration for Education Quality, 1(1), 36–47.

- Baha'udin, M., & Nurhidayati, A. (2019). Pengaruh Kompensasi, Kompetensi dan Disiplin Kerja Terhadap Kepuasan Kerja Karyawan (Studi Kasus UD. Darma Cipta Karya Lasem). Jurnal Akuntansi Dan Bisnis, 5(2).
- Baktiar, R. O., Ridlwan Muttaqin, & Dadan Abdul Aziz Mubarok. (2024). Pengaruh Disiplin Kerja, Lingkungan Kerja, dan Employee Engagement terhadap Kepuasan Kerja Pegawai pada Dinas Ketahanan Pangan dan Peternakan Provinsi Jawa Barat. JEMSI (Jurnal Ekonomi, Manajemen, Dan Akuntansi),
- Carrell, M. R., Elbert, N. F., & Hatfield, R. D. (2018). *Human Resource Management:* Strategies for managing a diverse and global workforce. Dryden Press.
- Dessler, G. (2020). Human Resource Management (16th ed.). Pearson.
- Dhani, N. K. S. J., & Surya, I. B. K. (2023). Pengaruh Motivasi, Kompensasi Dan Lingkungan Kerja Terhadap Kepuasan Kerja Karyawan (Studi Pada Pt Bali Busana Kreasi Di Kabupaten Badung).