

THE INFLUENCE OF WORK ENVIRONMENT AND WORK STRESS ON EMPLOYEES' INTENTION TO LEAVE AT THE REGIONAL DISASTER MANAGEMENT AGENCY OF BOGOR CITY

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Informasi	Abstract
Volume : 3 Nomor : 6 Bulan : Juni Tahun : 2026 E-ISSN : 3062-9624	<p><i>This study investigates how work environment and work stress shape employees' intention to leave at the Regional Disaster Management Agency (BPBD) of Bogor City, while also examining whether work stress acts as an intervening variable linking work environment to intention to leave. The study is driven by the growing phenomenon of workforce mobility in the public sector and the considerable share of contract-based personnel (PPPK) at BPBD Bogor City, a condition that carries implications for organizational continuity. A quantitative design was adopted, applying Partial Least Square-Structural Equation Modeling (PLS-SEM) via SmartPLS version 4.2.9. Data collection employed a census sampling approach, distributing Likert-scale questionnaires to all 72 employees of BPBD Bogor City. Hypothesis testing outcomes indicate that work environment exerts a positive and significant impact on intention to leave, yielding a path coefficient of 0.429, a t-statistic of 4.349, and a p-value of 0.000. Work stress similarly demonstrates a positive and significant effect on intention to leave, with a path coefficient of 0.351, t-statistic of 4.254, and p-value of 0.000. Work environment also significantly influences work stress, producing a path coefficient of 0.293, t-statistic of 2.938, and p-value of 0.003. Moreover, work stress is confirmed to serve as a significant mediating mechanism between work environment and intention to leave, reflected in an indirect path coefficient of 0.103, t-statistic of 2.266, and p-value of 0.023. The direction of these relationships diverges from prevailing theoretical assumptions, a pattern interpretable through the Job Demands-Resources (JD-R) Model in conjunction with the distinctive occupational context of BPBD personnel. The study concludes that any initiative to enhance workplace conditions at BPBD Bogor City must be paired with deliberate work stress management programs to meaningfully curtail employees' inclination to exit the organization.</i></p> <p>Keyword: Work Environment, Work Stress, Intention to Leave, PLS-SEM, Public Sector.</p>

A. INTRODUCTION

The work environment constitutes the full range of physical, psychological, social, and organizational circumstances that employees encounter in the course of their day-to-day professional activities. These circumstances include the availability of work facilities, interpersonal dynamics among colleagues, the extent of supervisory support, prevailing organizational culture, and the workload assigned to each individual. Collectively, these factors bear a direct relationship to key organizational outcomes such as productivity levels, employee job satisfaction, and workforce loyalty. Prior scholarship suggests that workplaces perceived as unsupportive tend to correlate with heightened occupational pressure and a weakening of employees' sense of belonging to the organization (Bachtiar et al., 2024).

Public sector institutions, disaster management bodies among them, are increasingly confronted with the challenge of managing workforce turnover and sustaining personnel retention. As a government agency, the Regional Disaster Management Agency (BPBD) of Bogor City relies substantially on the continuity and dedication of its staff to maintain operational effectiveness. Field observations conducted prior to this study revealed a number of issues affecting the work atmosphere at BPBD Bogor City, including an elevated pace of work, constant demands for emergency readiness, recurring employee fatigue, and a cyclical task structure that may gradually erode workers' professional commitment.

Adding to these concerns, the majority of BPBD Bogor City's workforce occupies contract-based positions (PPPK) rather than holding permanent civil servant (PNS) appointments a circumstance that inherently introduces greater uncertainty regarding job tenure. This structural feature is likely to shape how employees interpret their working conditions and, consequently, whether they contemplate departing from the organization.

Beyond being a by-product of unfavorable workplace conditions, work stress also functions as an autonomous factor that can drive employees toward the decision to leave. Work stress is understood as the physiological and psychological reaction an individual experiences when occupational demands surpass their ability to cope (Robbins & Judge, 2019). In the operational setting of BPBD, stress-inducing elements may include sudden deployments during disaster events, competing obligations between desk-based tasks and field responsibilities, and an underlying sense of precariousness in working arrangements.

Existing scholarly work has explored the interrelationships among work environment, work stress, and intention to leave, with most studies concluding that supportive work conditions alleviate both stress and the desire to resign, while elevated stress amplifies turnover intentions (Setiawan, 2022; Hartono et al., 2025; Nursalimah & Oktafien, 2023). Nonetheless, the bulk of this research has concentrated on private-sector contexts, leaving a relative scarcity of studies addressing public agencies defined by high-pressure, high-stakes work characteristics disaster management organizations being a prime example. This gap in the literature, combined with preliminary evidence of suboptimal working conditions at BPBD Bogor City, provides the rationale for undertaking a systematic quantitative investigation into how work environment and work stress collectively shape employees' intention to leave, with work stress assigned the role of intervening variable.

In light of the foregoing, this study seeks to examine the influence of work environment and work stress on the intention to leave among BPBD Bogor City employees, and to determine the extent to which work stress mediates the relationship between work environment and intention to leave.

B. RESEARCH METHOD

This study adopts a quantitative framework using a survey-based approach. The study population comprises all employees of the Regional Disaster Management Agency (BPBD) of Bogor City, numbering 72 individuals, encompassing both permanent civil servants (PNS) and contract-based personnel (Non-PNS/PPPK). Given the modest population size falling below the threshold of 100 a census sampling method was applied, whereby every member of the population was included as a respondent, resulting in a full sample of 72 employees.

Primary data were gathered through structured questionnaires administered using a five-point Likert scale, with response categories spanning from "strongly disagree" (1) to "strongly agree" (5). Within the research model, work environment (X1) and work stress (X2) serve as independent variables, while intention to leave (Y) constitutes the dependent variable. Work stress additionally assumes the role of an intervening variable, positioned between work environment and intention to leave.

Statistical analysis was performed using the Partial Least Square-Structural Equation Modeling (PLS-SEM) technique through SmartPLS software version 4.2.9. This analytical approach was chosen for its capacity to accommodate complex causal structures among multiple variables, and to concurrently assess both the measurement model and the structural model, without imposing prerequisites of large sample sizes or data normality (Ghozali, 2021; Hair et al., 2019). Model evaluation encompassed outer model assessments covering convergent validity, discriminant validity, and composite reliability as well as inner model diagnostics including R-Square values, path coefficients, effect size (f^2), predictive relevance (Q^2), and hypothesis evaluation through bootstrapping, with statistical significance defined as t-statistics exceeding 1.96 and p-value below 0.05.

C. RESULTS AND DISCUSSION

1. Descriptive Analysis

Descriptive analysis serves as a statistical approach for organizing and characterizing the fundamental features of the data derived from the research sample. A complete set of 72 questionnaires was obtained from the entire employee population of BPBD Bogor City, all of whom simultaneously constituted the study's research sample.

a. Respondent Characteristics

To offer a comprehensive demographic profile of the respondents, employee characteristics were categorized according to gender, age bracket, employment status, length of organizational tenure, and educational attainment, as summarized in Table 1.

Table 1. Recapitulation of Respondent Characteristics

No	Characteristic	Majority Category	Frequency	Percentage (%)
1	Gender	Male	56	77.8%
2	Age	>40 years	25	34.7%
3	Employment Status	Full/Part-time PPPK (Contract)	53	73.6%
4	Length of Service	>10 years	31	43.1%
5	Last Education	Senior High School (SMA/SMK)	31	43.1%

Source: processed primary data, 2026

As reflected in Table 1, the respondent profile indicates that male employees predominate (77.8%), which is largely attributable to the fieldwork-intensive and emergency-response character of BPBD operations. Employees over 40 years of age form the largest age segment (34.7%), while those holding contract status under the PPPK scheme account for 73.6% of the workforce a proportion that mirrors current government policy favoring the expansion of term-based appointments in public institutions such as BPBD Bogor City. In terms of organizational tenure, 43.1% of respondents have served for more than a decade, and an equal proportion hold a senior high school diploma (SMA/SMK) as their highest educational credential.

b. Descriptive Statistics of Research Variables

Descriptive findings reveal that the mean scores for the work environment variable (X1) range between 3.04 and 3.22, placing it within the moderate category. This suggests that employees do not yet perceive their workplace conditions at BPBD Bogor City as fully conducive to productive work. The work stress variable (X2) records average scores between 3.44 and 3.65, which fall in the moderately high to high range, reflecting the considerable occupational pressure inherent in disaster management roles characterized by unpredictability and high operational demands. The intention to leave variable (Y) produces mean scores between 2.51 and 2.88, classifying it in the low category. While this indicates that most employees currently lack a pronounced desire to exit the organization, the statistically significant influence of both work environment and work stress as confirmed through inferential analysis represents a latent risk that warrants ongoing monitoring.

2. Testing of Research Instruments

Instrument validation was carried out through assessment of both the measurement model (outer model) and the structural model (inner model), employing the PLS Algorithm alongside bootstrapping procedures within SmartPLS 4.2.9.

a. Convergent Validity

Validity at the indicator level was established when loading factor values are positive and exceed the 0.70 threshold. Across all three variables, loading factor scores ranged from 0.717 to 0.896, confirming that each indicator adequately captures the corresponding latent construct. In addition, Average Variance Extracted (AVE) values for all constructs surpassed the minimum criterion of 0.50, as shown in Table 2.

Table 2. Reliability and Convergent Validity Test Results

Variable	Cronbach's Alpha	Composite Reliability (rho_c)	AVE	Description
Intention to Leave	0.954	0.961	0.710	Valid & Reliable
Work Environment	0.939	0.948	0.646	Valid & Reliable
Work Stress	0.930	0.940	0.613	Valid & Reliable

Source: SmartPLS Output (v.4.2.9), 2026

The data in Table 2 demonstrate that Cronbach's alpha and composite reliability estimates for all three constructs exceed the 0.70 benchmark, and AVE values are consistently above 0.50. These outcomes collectively affirm that the research instruments exhibit satisfactory convergent validity and internal consistency.

b. Discriminant Validity

Discriminant validity was evaluated through two complementary methods: the Fornell-Larcker criterion and cross-loading analysis. The square root of each construct's AVE was found to surpass its inter-construct correlations (Intention to Leave = 0.843; Work Environment = 0.804; Work Stress = 0.783), and each indicator recorded its strongest loading on the construct it was designed to measure. Supplementary analysis using the Heterotrait-Monotrait (HTMT) ratio confirmed that all inter-construct values fell below the 0.90 cutoff (0.536 for Intention to Leave–Work Environment; 0.485 for Intention to Leave Work Stress), verifying satisfactory discriminant validity. Furthermore, Variance Inflation Factor (VIF) scores for all indicators remained below 5, signaling the absence of harmful multicollinearity in the model.

c. R-Square (R²)

The coefficient of determination (R-Square) reflects the degree to which the independent variables account for variance in the dependent variables within the PLS-SEM framework. Results are presented in Table 3.

Table 3. Coefficient of Determination (R-Square)

Dependent Variable	R-Square	R-Square Adjusted
Intention to Leave	0.395	0.378
Work Stress	0.086	0.073

Source: SmartPLS Output (v.4.2.9), 2026

Table 3 shows that the R-Square value for intention to leave stands at 0.395, signifying that work environment and work stress together account for 39.5% of the variance in this variable, while the remaining 60.5% is attributable to factors beyond the scope of the present model. For work stress, the R-Square value is 0.086, indicating that work environment alone explains 8.6% of its variability, with the substantial remaining proportion (91.4%) driven by other variables not investigated in this study.

d. Hypothesis Testing (Path Coefficient)

Hypothesis evaluation was carried out using the bootstrapping procedure. A relationship was deemed statistically significant when the t-statistic exceeded 1.96 and the associated p-value fell below 0.05. Results for both direct and indirect effects are displayed in Table 4.

Table 4. Path Coefficients and Hypothesis Testing Results

Path	(O)	(M)	(STDEV)	T-Stat.	P-Val.	Info
Work Environment -> Intention to Leave	0.429	0.435	0.099	4.349	0.000	Accepted
Work Stress -> Intention to Leave	0.351	0.353	0.082	4.254	0.000	Accepted
Work Environment -> Work Stress	0.293	0.323	0.100	2.938	0.003	Accepted
Work Environment -> Work Stress -> Intention to Leave	0.103	0.114	0.045	2.266	0.023	Accepted

Note: (O) = Original Sample, (M) = Sample Mean, (STDEV) = Standard Deviation, T-Stat. = T-Statistics (O/STDEV), P-Val. = P-Values.

Source: SmartPLS Output (v.4.2.9), 2026

Reviewing the parameters in Table 4, H1 is supported (O = 0.429; p = 0.000), confirming a positive and significant relationship between work environment and intention to leave. H2 is likewise supported (O = 0.351; p = 0.000), affirming that elevated work stress translates into a stronger intention to leave. H3 is accepted (O = 0.293; p = 0.003), indicating that a more favorable work environment assessment is associated with heightened work stress levels. The indirect effect analysis supports H4 (O = 0.103; p = 0.023), confirming that work stress functions as a meaningful intermediary between work environment and intention to leave.

e. Effect Size (f²) and Predictive Relevance (Q²)

F-square estimates place the effect of work environment on intention to leave (f² = 0.278) and the effect of work stress on intention to leave (f² = 0.186) in the moderate range, whereas the effect of work environment on work stress (f² = 0.094) is classified as small. Q-square values for work stress (0.041) and intention to leave (0.238) both exceed zero, confirming that the model retains meaningful predictive relevance for both endogenous variables.

Discussion

1. The Effect of Work Environment on Intention to Leave Among BPBD Bogor City Employees

Structural model results confirm that H1 is accepted ($O = 0.429$; t -statistics = $4.349 > 1.96$; $p = 0.000$), revealing that work environment exerts a positive and significant influence on employees' intention to leave. Notably, this implies that more favorable perceptions of the workplace are paradoxically associated with a greater inclination to consider leaving.

This outcome stands in contrast to dominant assumptions in HRM theory, where a conducive work environment is typically expected to foster organizational attachment and diminish resignation intentions (Sedarmayanti, 2017; Setiawan, 2022). Several contextual explanations are relevant here. First, as 73.6% of BPBD Bogor City's workforce holds PPPK contract status a classification that offers comparatively limited tenure security relative to permanent civil service a positive work environment may paradoxically raise employees' self-confidence and sense of professional worth, motivating them to pursue positions with more stable employment prospects elsewhere.

Second, the push-pull framework offers a useful interpretive lens. Even when internal workplace conditions are perceived positively, they may be insufficient to outweigh the appeal of external organizations offering greater job permanence, more competitive salaries, or more defined career trajectories. This aligns with Mobley (1977) position that the act of leaving an organization is a multidimensional decision shaped by far more than the quality of the immediate work setting.

2. The Effect of Work Stress on Intention to Leave Among BPBD Bogor City Employees

The results validate that work stress positively and significantly affects intention to leave ($O = 0.351$; t -statistics = $4.254 > 1.96$; $p = 0.000$), indicating that as occupational stress intensifies, employees become increasingly predisposed to exiting the organization.

This outcome resonates with the conceptualization offered by Robbins & Judge (2017), who frame work stress as a volatile condition in which individuals face demands, constraints, or ambiguities tied to outcomes they value. Given the nature of BPBD operations marked by perpetual readiness requirements and sporadic, high-intensity disaster responses the accumulation of chronic stress is a foreseeable consequence. The finding also corroborates Muviana (2022), who documented a consistent positive relationship between work stress and turnover intention, and Hartono et al. (2025), who concluded that unaddressed, prolonged work pressure propels employees toward seeking relief through organizational exit.

3. The Effect of Work Environment on Work Stress Among BPBD Bogor City Employees

Analysis reveals that work environment positively and significantly predicts work stress ($O = 0.293$; t -statistics = $2.938 > 1.96$; $p = 0.003$), suggesting that employees who rate their work environment more favorably simultaneously report higher stress levels.

This direction of effect departs from conventional theoretical positions. Robbins & Judge (2019) enumerate unsatisfactory workplace conditions strained relationships, insufficient infrastructure, ambiguous role definitions, or a dysfunctional organizational climate as primary stress triggers, implying that better environments should correspond to lower stress. The present findings, however, yield the reverse. This can be interpreted through a high demand environmental lens: favorable workplace perceptions may coexist with rising performance standards and expanded role obligations. At BPBD Bogor City, a well-resourced work environment is often inseparable from stringent professionalism benchmarks and heightened operational accountability. This pattern is theoretically grounded in the Job Demands-Resources (JD-R) Model Bakker & Demerouti (2007), which asserts that the availability of job resources does not invariably reduce stress when job demands escalate concurrently. For PPPK employees, who represent nearly three-quarters of the workforce, a well-structured environment may also carry implicit pressure to perform consistently in order to secure contract renewal.

4. The Effect of Work Environment on Intention to Leave through Work Stress as an Intervening Variable

Indirect effect analysis confirms that work environment influences intention to leave via the mediating role of work stress ($O = 0.103$; t -statistics = $2.266 > 1.96$; $p = 0.023$), establishing that work stress serves as a statistically significant conduit through which work environment transmits its effect on turnover intention among BPBD Bogor City employees.

This mediation dynamic is coherent in light of the preceding findings: a positively perceived workplace environment escalates work stress, which in turn amplifies resignation intentions a mechanism likely driven by heightened performance demands or by employees' growing awareness of potentially superior opportunities elsewhere. The prevalence of PPPK employees further compounds this dynamic, as this group exhibits pronounced sensitivity to occupational pressures and career trajectory concerns. Taken together, these findings reinforce the imperative that any effort to strengthen workplace quality at BPBD Bogor City must be paired with structured, proactive measures to address and manage occupational stress, in order to meaningfully reduce employees' inclination to depart.

D. CONCLUSION

Drawing on empirical findings from BPBD Bogor City employees, this study arrives at four key conclusions. First, work environment exerts a positive and significant effect on intention to leave (path coefficient = 0.429), a counter-intuitive result attributable to the dominance of PPPK contract employment and the push-pull dynamics associated with career aspirations. Second, work stress likewise positively and significantly influences intention to leave (path coefficient = 0.351), indicating that greater occupational stress escalates employees' desire to exit. Third, work environment has a positive and significant impact on work stress (path coefficient = 0.293), reflecting that positive workplace assessments can elevate psychological strain due to the heightened performance expectations accompanying a well-organized operational setting. Fourth, work stress is demonstrated to significantly mediate the relationship between work environment and intention to leave (indirect path coefficient = 0.103), functioning as an intervening mechanism with a modest yet statistically meaningful magnitude.

These findings collectively affirm that improving workplace quality at BPBD Bogor City cannot be pursued in isolation; it must be accompanied by deliberate stress management strategies, reinforced by clearer employment status guarantees, transparent career development pathways, and competitive compensation schemes all of which are essential to meaningfully curtailing employee turnover and sustaining organizational resilience in the delivery of public disaster management services.

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