

The Effect of Work Environment, Organizational Culture, and Work Engagement on Work Stress through Workload as a Mediating Variable

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ABSTRACT

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The enormous scope of management and supervisory tasks by the Bureau of BUMD, Investment, and Development Administration of West Java affects employees' high workload and stress levels. This study aims to determine the impact of the work environment, organizational culture, and work engagement on work stress through employee workload. The sampling technique used was saturated sampling; thus, all 50 employees were used as samples. The data collection technique used a questionnaire, which was then analyzed with SEM using Smart PLS 4.0. The study found that the work environment, organizational culture, engagement, and workload did not affect work stress. In contrast, work engagement significantly positively affected employee work stress. The work environment did not affect workload, while organizational culture positively affected employee workload. The workload could not mediate the influence of the work environment, organizational culture, or work engagement on employee work stress.

INTRODUCTION

Human resources are a highly strategic factor in organizations. Compared to other factors, human resources represent the most valuable asset within an organization. However, many employees or human resources experience work-related stress, particularly among the Millennial and Generation Z cohorts. Over the past four years, the highest percentage of employees experiencing work stress belonged to the Generation Z group, at 46% in 2021, while Millennials had a stress level of 45%. Work stress caused by their perception of a highly competitive work environment, long working hours, and tight deadlines for task completion has been significant (Sakitri, 2021).

Key factors that trigger work stress include concerns about their long-term financial future, daily finances, and family health/well-being. In contrast, worries about mental health and workplace factors such as heavy workloads, poor work/life balance, and unhealthy team cultures also play a role in influencing work stress (Deloitte, 2023). The work stress felt by employees represents a psychological aspect that every company needs to address promptly. Work stress is a condition that causes physical and mental

imbalance, affecting emotions, thought processes, and the condition of employees (Saraswati & Indiyati, 2022).

Employees can experience varying levels of work stress, for example, between those who work in the field and those in the company's office. This is the case for employees at the Bureau of BUMD, Investment, and Development Administration of West Java, who manage various vital sectors in the province. The Bureau of BUMD, Investment, and Development Administration of West Java has a small number of employees, totalling 50, consisting of 31 males and 19 females. The predominance of male employees is due to the nature of the work at the Bureau, which often involves technical or operational tasks, such as managing infrastructure, investments, or development projects. Additionally, considering that most employees have less than five years of service, many are still in the early stages of their careers. Therefore, with shorter employment duration, they are more susceptible to feelings of uncertainty, adjusting to new tasks, and adapting to the existing organizational culture.

The Bureau of BUMD, Investment, and Development Administration of West Java has implemented human resources policies to enhance employee performance and efficiency to reduce workload and work stress. One such strategy is the implementation of a talent pool. A talent pool is a database or collection of human resource candidates with high potential, organized by each BUMD (Regional-Owned Enterprises) to support the placement of employees whose talents match the needs of the tasks and responsibilities in each BUMD. This approach is expected to improve the effectiveness of HR empowerment and accelerate the revitalization of the BUMDs. However, despite the successful implementation of this policy, employees at this Bureau still face significant workloads due to the vast scope of their duties. The Bureau manages six distinctly different sectors: agribusiness, trade and industry, infrastructure and regional development, finance, oil, gas, renewable energy (Energi Jabar), tourism and creative economy, and public water utilities.

The enormous scope of management and supervision by the Bureau of BUMD, Investment, and Development Administration of West Java impacts the stress levels of its employees. Employees have various considerations concerning the work stress they experience when staying at a workplace. According to a survey conducted by Deloitte Global (2023), the primary reasons employees choose to work for a company are a work environment that provides a balance between work and life (32%), opportunities for learning and development (29%), and high wages or financial benefits (24%). If a company does not provide a comfortable working environment for its employees, they will easily consider quitting their jobs and looking for another company for greater comfort (Deloitte, 2023).

The work environment factor, consisting of elements surrounding employees, can be categorized into physical and non-physical work environments. The work environment

acts as a labour resource that plays a role in reducing work stress among employees. The more conducive the work environment, the less work stress there is. In this regard, providing a physical work environment free from noise, adequate lighting, good air circulation, temperatures that are neither too hot nor too cold, and work facilities that support Indonesian Gen Z employees can reduce employee work stress (Bakker, Demerouti, & Sanz-Vergel, 2023). Previous research has found a significant effect of the work environment on employee stress (Hamdali & Liswandi, 2023). This indicates that supportive physical and non-physical work environments can reduce work stress. However, differing findings have shown that the work environment does not affect employee stress (Cahyaningtyas & Santosa, 2021).

Organizational culture factors can also determine employee work stress. Organizational culture, which consists of patterns of beliefs and values understood, embodied, and practised by the organization, gives unique meaning and forms the basis for behavioural rules within the organization. Therefore, organizational culture acts as a controller and guide in shaping the attitudes and behaviours of employees within the organization. A positive organizational culture is directly associated with the performance of an organization, which will also improve. Previous researchers have demonstrated a significant negative impact of organizational culture on work stress (Santoso, 2020); (Kharisma, Prasilowati, & Ayuningtyas, 2019); however, there are also findings that organizational culture does not affect work stress (Sari Girsang, 2019).

Work engagement is a factor widely used by previous researchers to predict its impact on employee work stress. Work engagement is a strategy to prevent turnover within companies and is one of the efforts to enhance employee productivity (Zen, 2023). Employees of the engaged type feel committed to the company and are thus willing to contribute their energy and efforts to advance the organization. Conversely, employees who are not engaged focus more on their specific job tasks and are less oriented towards achieving the broader goals of their work (Lewiuci & Mustamu, 2016). Research has shown that employee engagement significantly affects work stress (Harmen & Sunjaya, 2022). However, other findings indicate that work engagement does not substantially impact work stress (Vandiya & Estikariena, 2018); (Nadira, 2018).

The findings from previous researchers highlighted above indicate that there are still research gaps regarding the factors that influence employee work stress, making it compelling to re-examine these issues using the same variables: work environment, organizational culture, and work engagement about employee work stress. However, this study introduces an additional mediating variable, workload, as a novel element in the research. Workload directly influences work stress, as identified in earlier research findings (Maharani & Budiando, 2019). (Raharja & Heryanda, 2021). This study will use workload as a mediating variable, which represents an original contribution by the researcher compared to previous studies. It aims to provide consistent results and to

determine whether workload can mediate the effects of the work environment, organizational culture, and work engagement on employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java, where the complexity of tasks and responsibilities is significant. This Bureau has a vast scope of duties across six major sectors, and the diverse responsibilities involved can impose additional pressure or workload on employees managing and overseeing these sectors. Therefore, work stress becomes a significant issue that needs attention at the Bureau of BUMD, Investment, and Development Administration of West Java.

LITERATURE REVIEW

Work stress is a psychological and physical reaction to internal conditions or environmental changes perceived as disruptive and impacting an individual's work outcomes (Iati & Mulyana, 2019). Stress results from an imbalance between the demands placed on an individual and the resources they possess; the greater the disparity, the higher the stress experienced, which can be threatening (Asih, 2018). Work stress is affected by various factors, including the non-conducive physical environment of the workplace, such as lighting, noise, temperature conditions, and pollution (Nuzulia, 2021). A fresh, comfortable work environment that meets adequate standards will contribute to the comfort of employees in performing their duties (Farida & Hartono, 2016), ultimately reducing work stress. Previous research has found a significant negative impact of the work environment on work stress among Gen Z employees in Indonesia (Hamdali & Liswandi, 2023); (Rizki et al., 2019); (Putra & Saraswati, 2022). This indicates that a supportive work environment's physical and non-physical aspects can reduce stress. Based on this, the following hypothesis can be formulated:

H1: The work environment hurts work stress

Organizational culture is also related to the context of organizational development, which means that this culture exists in the organization's history, is believed collectively, and is not easily manipulated directly (Santoso, 2020). Organizational culture is defined as a set of collectively recognized beliefs, attitudes, relationship structures, and assumptions that all organization members can directly or utilize to achieve organization et al., 2019). Previous researchers have proven a significant negative effect of organizational work stress (Santoso, 2020); (Kharisma, Prasilowati, & Ayuningtyas, 2019). This indicates that the better the organized organization is, the lower the level of employee stress. Based on this, the following hypothesis can be formulated:

H2: Organizational culture hurts work stress

Work engagement can also trigger the occurrence of work stress. Employees with high engagement will feel comfortable in their roles, reducing stress levels. Work engagement is a sequence of commitment and involvement where an employee embraces the organization. When employees are engaged, they recognize responsibilities toward

business objectives and motivate their colleagues toward the success of the organization, 2023). The effect of work engagement on work stress has been confirmed by previous research, which found a negative effect of work engagement on work stress (Harmen & Sunjaya, 2022). This suggests that the more employees feel connected to the company, such as having job security guarantees, the lower their work stress will be. Based on this, the following hypothesis can be formulated:

H3: Work engagement hurts work stress

Causes of stress in the workplace include having an excessive workload, disproportionate quality of supervision, feeling pressured or facing time constraints, role ambiguity, insufficient authority, inadequate feedback, various forms of change, and interpersonal conflicts that can cause work stress. This aligns with research conducted by Suryaningrum (2015), which stated that workload positively and significantly affects work stress (Raharja & Heryanda, 2021). Workload refers to the task demands placed on an individual that must be completed on time with physical and non-physical capabilities, skills, and available time. It involves targets that must be met, work conditions, standard work time in performing tasks, and the delegation of tasks and authority. Based on this, the following hypothesis can be formulated:

H4: Workload has a positive effect on work stress

Workers need to be comfortable working optimally and productively. Therefore, the work environment must be managed or designed to become conducive to workers performing their activities in a safe and comfortable atmosphere (Tarwaka, Solichul, Bakri, & Sudiajeng, 2014). Workers comfortable with their workplace's physical and social environment tend to experience a lighter workload. Conversely, a poor work environment, such as inadequate facilities or unsupportive interpersonal relationships, can increase the perceived workload. Based on this, the following hypothesis can be formulated:

H5: The work environment hurts the workload

A transparent, positive, and supportive organization creates better structures for employees to perform their duties. Previous research has demonstrated that organizations affect employee workload (Rizki et al., 2019); (Putra & Saraswati, 2022). A culture that fosters collaboration, open communication, and recognition of employee achievements can help reduce pressure or workload. Conversely, an unclear or unsupportive organization adds complexity to tasks, increasing workload. Based on this, the following hypothesis can be formulated:

H6: Organizational hurts workload

High work engagement indicates that employees feel a sense of belonging and commitment to the organization of cognitive evaluation theory (CET) (Huyen, 2020), higher employee engagement is associated with a lower perception of workload, and engagement is linked to increased intrinsic motivation, a sense of competence, and

autonomy in their work. Employees who feel valued and are given opportunities to develop are better equipped to manage their workload more efficiently and effectively. Based on this, the following hypothesis can be formulated:

H7: Work engagement hurts workload

A supportive work environment directly affects employee work stress and reduces the perceived workload. A lighter workload alleviates the psychological pressure that is a primary cause of stress. As explained in Cognitive Evaluation Theory (Huyen, 2020), a supportive work environment enhances employees' intrinsic motivation, which in turn helps them manage their workload more effectively and mitigates the adverse effects of stress. Conversely, an unsupportive work environment increases perceived workload and elevates employees' stress levels.

H8: The work environment hurts work stress through workload

A positive organization reduces work stress by reducing excessive workload. Employees find it easier to manage their tasks with a culture that supports communication, role clarity, and collaboration. This reduction in workload ultimately decreases the stress experienced by employees. Cognitive Evaluation Theory (CET) (Huyen, 2020) explains that a supportive organization enhances employees' intrinsic motivation, making them feel more competent and in control of their work. This reduces the perception of a heavy workload, lowering their stress levels.

H9: Organizational work engagement hurts work stress through workload

Employees with high work engagement are better able to manage their workload, and as a result, they experience lower stress levels. As outlined in Cognitive Evaluation Theory (CET) (Huyen, 2020), employees who feel competent and have autonomy in their work tend to perceive a lighter workload because they can align job demands with their capacity. A more manageable workload reduces pressure and work stress. Conversely, employees with low engagement, or those who feel incompetent or lack control over their work, are likelier to perceive a heavier workload, ultimately increasing their stress levels.

H10: Work engagement hurts work stress through workload

Based on the explanation above, a conceptual framework can be developed as illustrated in the diagram below:

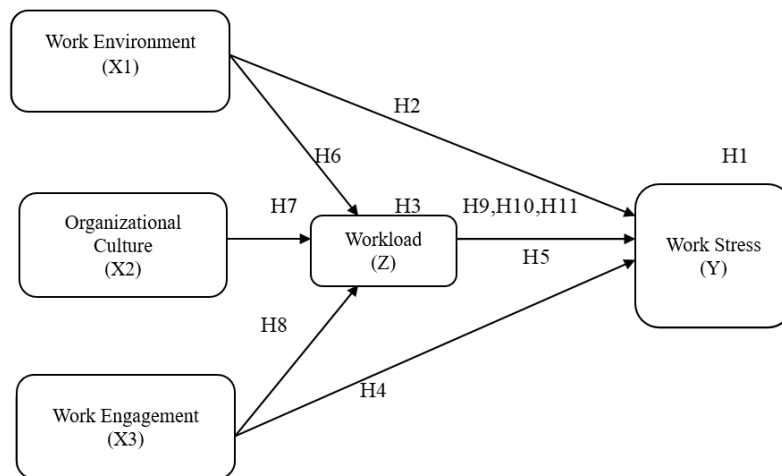


Figure 1. Conceptual Framework of the Research Model

METHOD

This study used a quantitative approach with an explanatory design, which is research aimed at testing a theory or hypothesis to either strengthen or reject the theoretical findings of previous studies (Fauzi et al., 2022). The dependent variable in this study was work stress (Y2), which was measured using indicators such as individual pressure, group pressure, physical environmental pressure, and organizational pressure (Budiasa, 2021). The mediating variable in this study was workload (Y1), which was measured using indicators including targets to be achieved, job conditions, and time usage (Rolos, Sambul, & Rumawas, 2018). The independent variables in this study were the work environment, organizational culture, and work engagement.

The work environment (X1) in this study was measured using indicators that included the physical environment (lighting, temperature, air circulation, noise, aroma, decoration, layout, and background music) and the non-physical environment (security system, work atmosphere, relationships with colleagues, and work facilities) (Rianda & Winarno, 2022). Organizational culture (X2) was measured using indicators such as innovation and risk-taking, attention to organization members/employees, result orientation, human orientation, and team orientation (Kharisma et al., 2019). The work engagement variable (X3) was measured using indicators that included vigour, dedication, and absorption (Rustono & Fattah, 2015).

In this study, data collection was conducted using a questionnaire, a set of written questions presented to respondents, who provided their answers in written form. The questionnaire used in this study was closed-ended, consisting of a series of questions with a limited number of answer options, requiring respondents to select their answers from the provided alternatives. The questionnaire was distributed to the Bureau of BUMD, Investment, and Development Administration of West Java employees.

The population in this study comprised all employees at the Bureau of BUMD, Investment, and Development Administration of West Java, totalling 50 employees. All employees were included as the research sample, making the sampling technique used in this study a saturation sampling method. Data analysis was performed using the Structural Equation Modeling (SEM) Partial Least Squares (PLS) method with SmartPLS version 4 software. This approach was used to explain the presence or absence of relationships between latent variables and to confirm the underlying theory (Duryadi, 2021).

With this method, the researcher could analyze causal relationships between complex and simultaneous variables and test both direct and indirect effects among variables. The PLS method offers advantages in handling data with non-normal distributions and limited sample sizes, making it well-suited for this study, which utilized a small sample size.

RESULTS AND DISCUSSION

Results

Structural Model Testing (Outer Model)

The evaluation of the measurement model or outer model began with construct validity testing, which included convergent validity assessed through loading factor values, Average Variance Extracted (AVE) values, and discriminant validity indicated by cross-loading values. The second stage involved reliability testing, shown by composite reliability values. The tools used to measure validity in this study were convergent and discriminant validity, processed using SmartPLS version 4 software. The results of the convergent validity test indicated that some items were invalid because their outer loading values were below 0.70. For the work stress variable (Y), three items were invalid. For the other variables, namely work environment (X1), organizational culture (X2), and workload (Y1), each had one invalid item, while the work engagement variable (X3) had four invalid items. These invalid items were removed (deleted) from the research model until all items had outer loading values above 0.70. The results of the second validity test showed that all indicators within the variables were valid and could be used for further analysis.

Discriminant validity is one method to determine whether the data is valid. Discriminant validity is measured by comparing the Average Variance Extracted (AVE) square root to the correlation value of latent variables. The condition for validity is that the square root of AVE must be greater than the correlation of latent variables to be considered reliable. The comparison results between the square root of AVE and the correlation of latent variables are as follows.

Table 1. Average Variance Extracted (AVE) Values

Variable	Average Variance Extracted (AVE)	Square Root of AVE	Description
Work Stress (Y2)	0.640	0.800	> 0.50 (Reliable)
Work Environment (X1)	0.674	0.821	> 0.50 (Reliable)
Organizational Culture (X2)	0.638	0.799	> 0.50 (Reliable)
Work Engagement (X3)	0.595	0.771	> 0.50 (Reliable)
Workload (Y1)	0.656	0.810	> 0.50 (Reliable)

Source: Processed primary data, 2024

Table 1 illustrates the results of the instrument validity testing using discriminant validity, measured through the square root of the AVE (Average Variance Extracted). The test results indicate that the square root of the AVE for each variable exceeds 0.50, which satisfies the criteria for good validity and reliability. Therefore, these validity test results confirm that the four variables tested in this study are valid and can be used for further analysis.

The following table presents the results of the SmartPLS analysis, specifically for Composite Reliability and Cronbach's Alpha.

Table 2. Composite Reliability Values

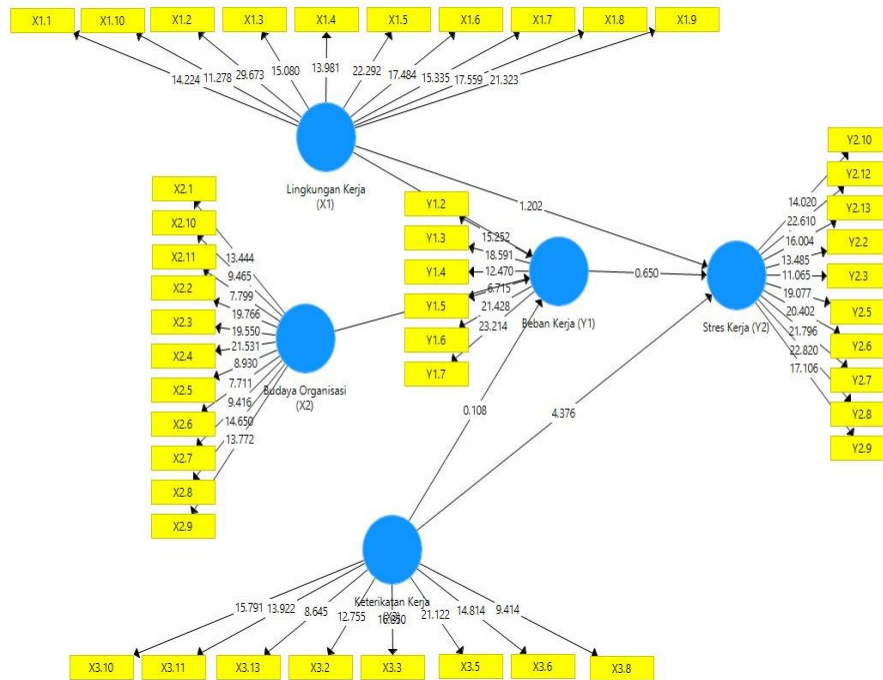
Variable	Composite Reliability	Description
Work Stress (Y2)	0.958	> 0.7 (Reliable)
Work Environment (X1)	0.958	> 0.7 (Reliable)
Organizational Culture (X2)	0.954	> 0.7 (Reliable)
Work Engagement (X3)	0.950	> 0.7 (Reliable)
Workload (Y1)	0.930	> 0.7 (Reliable)

Source: Processed primary data, 2024

Table 2 above shows that all indicators and variables in this study are reliable, as the composite reliability values for all variables exceed 0.70. The instruments used for all variables in this study are reliable, meaning they can be trusted as effective tools for data collection.

Structural Model Testing (Inner Model)

The research model was developed after processing data using SmartPLS version 3. This model illustrates the relationships between the constructs of the variables: work environment (X1), organizational culture (X2), work engagement (X3), workload (Y1), and work stress (Y2). The complete model formed by the interrelation of the constructs of these research variables is as follows:



Source: PLS Output, 2024

Figure 2. Full Research Model

This test was conducted to determine whether a hypothesis is accepted or rejected by comparing the p-value with 0.05. If the p-value is greater than 0.05, the hypothesis is rejected. For further details, refer to the table below:

Table 3. Hypothesis Testing for Direct Effects

No	Variable	Original Sample Estimate	Sample Mean	Standard Deviation	T-Statistic	P-Values	Description
1	Work Environment → Workload	0.123	0.136	0.257	0.479	0.632	Rejected
2	Organizational Culture → Workload	0.787	0.803	0.179	4.388	0.000	Accepted
3	Work Engagement → Workload	-0.016	-0.041	0.146	0.108	0.914	Rejected
4	Work Environment → Work Stress	0.283	0.263	0.224	1.260	0.208	Rejected
5	Organizational Culture → Work Stress	0.058	0.051	0.099	0.583	0.560	Rejected
6	Work Engagement → Work Stress	0.644	0.668	0.147	4.367	0.000	Accepted
7	Workload → Work Stress	0.074	0.053	0.113	0.650	0.516	Rejected

Source: Processed primary data, 2024

Hypothesis testing for indirect effects in path analysis or structural models in this study involves the analysis of mediation or intervening variables. Indirect effects measure the extent to which independent variables influence dependent variables through a mediator or intervening variable. The results of the indirect effect testing are presented in the table below:

Table 4. Hypothesis Testing for Indirect Effects (Specific Indirect Effect)

No	Variable	Original Sample Estimate	Sample Mean	Standard Deviation	T-Statistic	P-Values	Description
1	X1 → Y1 → Y2	0.009	-0.007	0.031	0.288	0.773	Rejected
2	X2 → Y1 → Y2	0.058	0.051	0.099	0.583	0.560	Rejected
3	X3 → Y1 → Y2	-0.001	0.004	0.016	0.070	0.944	Rejected

Source: PLS Output Results, 2024

Discussion

The Effect of Work Environment on Employee Work Stress

The data analysis using SmartPLS version 4 produced an original sample estimate of 0.283 (t-statistic = 1.260 and p-value = 0.208 > 0.05), leading to the rejection of the first hypothesis (H1). This indicates that the work environment does not affect work stress. The quality of the physical or non-physical work environment does not impact employee work stress. This finding aligns with previous research that the work environment does not affect employee work stress (Cahyaningtyas & Santosa, 2021). However, it contradicts other studies that identified a significant negative effect of the work environment on the work stress of Gen Z employees in Indonesia (Hamdali & Liswandi, 2023; Rizki, Hamid, & Mayowan, 2019; Putra & Saraswati, 2022).

The work environment factor that does not affect employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province indicates that the work environment, both physical and non-physical, is not a primary source of work stress among employees in this institution. Although various aspects of the work environment (such as facilities, layout, comfort, or social interactions) exist, they do not significantly increase or reduce employees' stress levels.

According to Cognitive Evaluation Theory, part of intrinsic and extrinsic motivation theory, individuals evaluate situations and work environments based on how these factors affect their sense of autonomy and competence (Huyen, 2020). A supportive environment that fosters feelings of autonomy and competence typically enhances intrinsic motivation and reduces stress. Conversely, an environment that limits these feelings can increase stress. However, the findings of this study reveal that the work environment does not affect the work stress of employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province. This suggests that employees do not evaluate the work environment as a factor that limits their autonomy or

competence; therefore, the environment does not cause significant stress. This means that even though the work environment conditions may not be optimal, employees feel these conditions do not affect how they perform their tasks or interact. Cognitive Evaluation Theory also emphasizes the importance of perceived control, suggesting that employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province feel they have control over some aspects of their work. These preconditions that are received control pins and prevent stress from increasing even in less-than-ideal work environment conditions. In this context, employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province can effectively manage other job-related factors (e.g., tasks and responsibilities) despite the suboptimal work environment, which does not lead to stress.

The Effect of Organizational Culture on Employee Work Stress

The data analysis produced an original sample estimate value of 0.058 (t-statistic = 0.583 and p-value = 0.560 > 0.05), leading to the rejection of the second hypothesis (H2). This indicates that organizational culture does not affect work stress. It shows that the quality of organizational culture does not impact work stress. This finding is consistent with previous research (Sari Girsang, 2019), which found that organizational culture does not affect work stress. However, it differs from other studies that have demonstrated a significant negative effect of organizational culture on work stress (Santoso, 2020; Kharisma et al., 2019).

This study found that organizational culture does not affect the work stress of employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province. The lack of effect of organizational culture on employee work stress in this institution indicates that the organization's values, norms, and practices are not the primary factors triggering employee work stress. This means that although organizational culture is an essential aspect of workplace life, employees in this institution do not perceive that the culture significantly affects their stress levels.

According to Cognitive Evaluation Theory, the lack of organizational culture's effect on employees' work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province can be explained by how employees evaluate the organizational culture and its effect on their autonomy and competence. If the organizational culture is perceived as neither limiting nor threatening employees' autonomy and competence and does not impose excessive external control, then the culture will not cause stress. Additionally, suppose employees have already adapted to and evaluate the organizational culture positively. In that case, they do not experience psychological pressure from the values and norms in their work environment, which consequently does not impact their stress levels. Cognitive Evaluation Theory emphasizes the importance of internal control over external control (Huyen, 2020). Stress increases when individuals feel overly controlled by external factors, such as rigid rules or norms

within the organizational culture. However, if employees perceive that the organizational culture at the Bureau of BUMD does not overly constrain them or impose excessive control, then the culture will not trigger stress. Employees at the Bureau of BUMD may have undergone an adaptation process to the existing organizational culture, so they no longer feel pressured by the norms and values of the organization. This adaptation makes employees feel comfortable and competent in performing their tasks without being affected by the organizational culture.

The Effect of Work Engagement on Employee Work Stress

The data analysis produced an original sample estimate of 0.644 (t-statistic = 4.367 and p-value = 0.000 < 0.05), leading to the acceptance of the third hypothesis (H3). This indicates that work engagement has a significant positive effect on work stress. It shows that the level of work engagement does not reduce work stress. Previous studies consistent with this finding showed that employee engagement significantly affects work stress (Harmen & Sunjaya, 2022). However, other studies found differing results, showing that work engagement does not significantly affect work stress (Vandiya & Etikariena, 2018; Nadira, 2018), indicating that whether employees have high or low engagement does not affect their stress levels.

This finding that work engagement positively affects employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province indicates that the higher the level of employee involvement or engagement with their work, the greater the possibility of experiencing stress. This happens because high work engagement is often accompanied by greater job demands, both in terms of workload and performance expectations. Employees at the Bureau of BUMD who are highly engaged with their work tend to set high expectations for themselves or accept more tasks due to being perceived as capable and skilled. When work engagement becomes too intense, it can lead to internal pressure, overcommitment, and excessive emotional and physical burdens, ultimately increasing the risk of work stress. Therefore, management must balance healthy work engagement with over-engagement to support employee performance without increasing unnecessary stress.

The positive effect of work engagement on employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province can be explained by reduced feelings of autonomy and competence and increased emotional burdens and external pressures. When employees are highly engaged in their work, they may feel they are losing control over critical aspects of their jobs and personal lives. Additionally, excessive engagement can lead employees to feel that they must constantly perform optimally, which increases the risk of emotional exhaustion, cognitive strain, and stress. Thus, while work engagement is generally considered a positive attribute, when employees feel overly attached and lose control, it can become a significant source of stress.

The Effect of Workload on Employee Work Stress

The data analysis produced an original sample estimate value of 0.074 (t-statistic = 0.650 and p-value = 0.516 > 0.05), leading to the rejection of the fourth hypothesis (H4). This indicates that workload does not affect work stress. It shows that the level of workload, whether high or low, does not affect work stress. Previous studies tend not to align with the findings of this study, as their results indicate that workload has a positive effect on work stress (Maharani & Budianto, 2019); (Raharja & Henryanda, 2021); (Hamdali & Liswandi, 2023); (Cahyaningtyas & Santosa, 2021); (Mukti, 2022). These previous research findings suggest that workload is one of the factors that should play an essential role in affecting employee work stress levels.

This study found that workload does not affect employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province because employees have sufficient support from supervisors and colleagues, enabling them to manage their workload without feeling pressured. Additionally, good time management skills help them handle high workloads without causing stress, and the institution has a work culture that supports a balance between work and personal life, reducing the perceived pressure from workload. The absence of an effect of workload on employee work stress can be explained through Cognitive Evaluation Theory (CET). Employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province experience autonomy, feel supported, possess adequate competence, and are motivated by intrinsic factors. As a result, workload is not perceived as something burdensome. Instead, employees at the Bureau view it as a manageable challenge that does not lead to increased work stress.

The Effect of Work Environment on Workload

The data analysis produced an original sample estimate value of 0.123 (t-statistic = 0.479 and p-value = 0.632 > 0.05), leading to the rejection of the fifth hypothesis (H5). This indicates that the work environment does not affect workload. Previous studies generally do not align with this finding, as they concluded that the work environment significantly affects workload (Siburian, Pio, & Sambul, 2021); (Nasution, 2022). The difference in the results of this study is caused by the different organizational contexts, which have unique characteristics related to work culture, management systems, and organizational structure.

This study found that the work environment does not affect employees' workload at the West Java Province Bureau of BUMD, Investment, and Development Administration. This lack of effect is due to the formal organizational structures, standardized work procedures, employee adaptation, or high skill levels. Workloads determined by organizational policies and regulations are fixed and not easily affected by environmental factors, meaning that the dynamics of the work environment do not affect their perception of workload. In other words, as long as formal rules and processes set

workloads, the work environment will have little effect on the amount or type of work employees are required to complete. Within the framework of Cognitive Evaluation Theory (CET), the reason why the work environment does not affect the workload of employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province lies in employees' cognitive evaluation of their control, autonomy, and competence in completing tasks. When employees feel a high sense of control and confidence in their competence and are motivated by intrinsic factors, the effect of the work environment becomes less significant. Internal evaluations, intrinsic motivation, and a strong perception of competence enable employees to remain focused on their tasks and responsibilities without being overly affected by environmental conditions. In this context, the work environment does not directly change or affect their perception of workload.

The Effect of Organizational Culture on Employee Workload

The data analysis results produced an original sample estimate of 0.787 (t-statistic = 4.388 and p-value = 0.000 < 0.05), leading to the acceptance of the sixth hypothesis (H6) of this study. This means that organizational culture has a significant positive effect on workload. It indicates that the better the organizational culture, the greater the workload of employees. This finding is supported by previous studies that also found a positive effect of organizational culture on employee workload (Rizki et al., 2019); (Putra & Saraswati, 2022).

This study found that organizational culture positively affects employees' workload at the Bureau of BUMD, Investment, and Development Administration of West Java Province. This result reflects a significant relationship between the organization's values, norms, and practices and how employees perceive and manage their workload. Organizational culture in this context affects employees' perceptions of workload, including its volume, demands, and the quality of tasks to be completed. Within the framework of Cognitive Evaluation Theory (CET) (Huyen, 2020), the culture at the Bureau of BUMD, Investment, and Development Administration of West Java Province, which tends to emphasize competition, recognition, innovation, or high-performance standards, drives employees to perform cognitive evaluations that increase their perception of workload.

The Effect of Work Engagement on Employee Workload

The data analysis produced an original sample estimate of -0.016 (t-statistic = 0.108 and p-value = 0.914 > 0.05), leading to the rejection of the seventh hypothesis (H7) of this study. This means that work engagement does not affect workload. It indicates that whether work engagement is high or low, it does not affect workload. This finding is supported by previous studies that also found work engagement does not affect employee workload (Harmen & Sunjaya, 2022); (Vandiya & Estikarieina, 2018); (Nadira, 2018).

This study found that work engagement does not affect employees' workload at the Bureau of BUMD, Investment, and Development Administration of West Java Province. Within the framework of Cognitive Evaluation Theory (CET), the finding that work engagement does not affect employee workload at the Bureau of BUMD, Investment, and Development Administration of West Java Province can be explained through several cognitive mechanisms that affect how employees evaluate their workload. According to Cognitive Evaluation Theory, high work engagement does not necessarily affect employees' perception of their workload, particularly in highly structured environments affected by external factors, such as at the Bureau of BUMD, Investment, and Development Administration of West Java Province. Although employees may feel intrinsically motivated and engaged in their work, their cognitive evaluation of workload remains affected by external factors, such as organizational demands, performance targets, and task structures that cannot be altered solely by increased work engagement. In such situations, the workload is more objective and determined by formal rules and strict administrative processes. Work engagement, associated with intrinsic motivation and a sense of competence, is not strong enough to change employees' perception of a workload largely controlled by extrinsic and structural factors within the organization.

The Mediating Role of Workload in the Effect of Work Environment, Organizational Culture, and Work Engagement on Employee Work Stress

The data analysis produced an original sample estimate of 0.009 (t-statistic = 0.288 and p-value = 0.773 > 0.05), indicating that workload does not mediate or serve as a mediating variable between the work environment and work stress, leading to the rejection of the eighth hypothesis (H8). This shows that employee work stress at the Bureau of BUMD, Investment, and Development Administration of West Java Province is often affected by psychological factors unrelated to direct workload, such as anxiety, the need for recognition, or concerns about future career prospects. Employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province who feel undervalued or lack sufficient support in the workplace may experience stress even if their workload is not particularly heavy.

The original sample estimate value of 0.058 (t-statistic = 0.583 and p-value = 0.560 > 0.05) indicates that workload does not mediate or serve as a mediating variable between organizational culture and work stress, resulting in the rejection of the ninth hypothesis (H9). This shows that employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province who work within a supportive organizational culture have better psychological well-being, which helps them cope with work pressure or demands without feeling excessively stressed. A culture that promotes collaboration, recognition of individual contributions, and work-life balance can reduce work stress without affecting the workload.

Similarly, the original sample estimate of -0.001 (t -statistic = 0.070 and p -value = $0.944 > 0.05$) indicates that workload does not mediate or serve as a mediating variable between work engagement and work stress, resulting in the rejection of the tenth hypothesis (H10). This shows that employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province with high work engagement perceive their workload differently. Employees view their work as a challenge to be addressed to achieve organizational goals rather than as a source of pressure that increases stress. This indicates that the perception of workload is more significant than its amount or intensity in the relationship between work engagement and stress among employees at the Bureau of BUMD, Investment, and Development Administration of West Java Province.

CONCLUSION

The research findings and discussion show that the work environment, organizational culture, work engagement, and workload do not affect work stress. In contrast, work engagement significantly positively affects employee work stress. The work environment does not affect workload, whereas organizational culture positively affects employee workload. The workload does not mediate the effect of the work environment, organizational culture, or work engagement on work stress among the Bureau of BUMD, Investment, and Development Administration employees of West Java Province.

The highest work stress experienced by employees is the feeling of having a stagnant career and pressure within workgroups. Therefore, the organization must provide structured and transparent career development programs, such as new skills training, mentoring, or job rotation. With these programs, employees can perceive opportunities to enhance their skills and develop their careers, thereby reducing the sense of stagnation. Additionally, to address workgroup pressure, the organization should provide team-building training or teamwork workshops to strengthen social bonds and collaboration among group members.

This study is not without limitations, which serve as weaknesses and can provide input for future research. The first limitation is the sample size, which is restricted to 50 employees and may not capture diversity in job positions, age, gender, education, and work experience. Secondly, this research was conducted exclusively on employees of the Bureau of Regional-Owned Enterprises, Investment & Development Administration of West Java Province, a government institution. As a result, the findings may not reflect conditions in the private sector or other regions with different characteristics. Thirdly, this study used a cross-sectional design, meaning data was collected simultaneously. As a result, it could only identify relationships between variables but could not establish the direction or causality of these relationships. Therefore, future research should consider using a longitudinal design to explore long-term causal relationships between

organizational culture, work environment, employee engagement, workload, and work stress.

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