



The Influence of Bureaucratic Administration and Human Resource Competence on Organizational Performance with Work Engagement as a Moderating Variable

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ABSTRACT: This study examines the influence of bureaucratic administration and human resource competence on organizational performance, with work engagement acting as a moderating variable. Organizational performance is an important factor in ensuring operational effectiveness and service quality, particularly in strategic infrastructure sectors such as port operations. This research aims to analyze how administrative systems and employee competencies contribute to improving organizational performance in the Operational Department of Timor Port Tibar, Timor-Leste.

This study employed a quantitative research approach using a survey method. Data were collected through structured questionnaires distributed to employees working in the operational department. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine both direct and moderating relationships among variables.

The results indicate that bureaucratic administration and human resource competence positively influence organizational performance. Furthermore, work engagement strengthens the relationship between bureaucratic administration and organizational performance as well as the relationship between human resource competence and organizational performance. These findings highlight the importance of effective administrative systems, competent human resources, and strong employee engagement in improving organizational performance in port operations.

KEYWORDS: Bureaucratic Administration, Human Resource Competence, Work Engagement, Organizational Performance

1. INTRODUCTION

Organizational performance has become a critical concern for both public and private sector organizations as they face increasing demands for efficiency, transparency, and service quality. In strategic infrastructure sectors such as ports, organizational performance plays a vital role in supporting national economic development, international trade, and logistics systems. Ports function as key nodes in global supply chains, and their effectiveness directly influences the competitiveness of a country's economy.

Timor Port Tibar, as the primary port facility in Timor-Leste, holds a strategic position in facilitating maritime transportation and logistics activities. The port is expected to deliver efficient, reliable, and timely services to support the movement of goods and enhance national trade performance. However, like many public and operational organizations in developing countries, Timor Port Tibar faces various internal organizational challenges that may affect its overall performance.

One of the key challenges relates to bureaucratic administration. Bureaucratic systems are designed to ensure order, accountability, and consistency through formal rules, hierarchical authority, and standardized procedures. According to Weber's theory of bureaucracy, a rational and well-structured administrative system can enhance organizational efficiency and effectiveness. Nevertheless, in practice, bureaucratic administration may also lead to rigid procedures, slow decision-making, and limited flexibility, particularly in operational environments that require rapid coordination and responsiveness.

In addition to administrative structures, human resource competence is a crucial factor influencing organizational performance. Human resource competence refers to the combination of employees' knowledge, skills, and work attitudes that enable them to perform their tasks effectively. In port operations, inadequate competence can result in operational delays, safety risks, and service quality problems. Therefore, improving employee competence through continuous training and development is essential for achieving sustainable organizational performance.



Furthermore, work engagement has emerged as an important psychological factor that influences how employees utilize organizational resources and competencies. Work engagement reflects a positive work-related state characterized by vigor, dedication, and absorption. Based on the Job Demands–Resources (JD-R) model, work engagement enhances the motivational process through which job resources and individual capabilities translate into improved performance outcomes. Employees who are highly engaged are more likely to apply their competencies effectively and support organizational systems.

Despite the importance of these factors, empirical studies examining the combined effects of bureaucratic administration, human resource competence, and work engagement on organizational performance remain limited, particularly in the context of port operations in developing countries such as Timor-Leste. This gap highlights the need for further research to better understand how administrative systems, employee competence, and engagement interact to influence organizational performance.

Based on the background described above, several organizational issues can be identified. First, although bureaucratic administration is intended to improve efficiency and accountability, excessive rigidity and procedural complexity may hinder operational effectiveness in port environments. Second, variations in human resource competence among employees may affect the consistency and quality of operational performance. Third, differences in employee work engagement may influence how effectively bureaucratic systems and competencies contribute to organizational performance.

These issues raise important research questions regarding the extent to which bureaucratic administration and human resource competence influence organizational performance, as well as whether work engagement strengthens these relationships. A lack of empirical evidence addressing these questions, particularly in the context of Timor Port Tibar, creates uncertainty for organizational leaders seeking to improve performance through administrative and human resource strategies.

The primary objective of this study is to examine the influence of bureaucratic administration and human resource competence on organizational performance at the Operational Department of Timor Port Tibar. Specifically, the study aims to:

1. Analyze the effect of bureaucratic administration on organizational performance.
2. Examine the effect of human resource competence on organizational performance.
3. Investigate the moderating role of work engagement in the relationship between bureaucratic administration and organizational performance.
4. Analyze the moderating role of work engagement in the relationship between human resource competence and organizational performance.

The significance of this study is twofold. From a theoretical perspective, the study contributes to organizational and human resource management literature by integrating bureaucratic theory, competence-based views, and the Job Demands-Resources model to explain organizational performance. From a practical perspective, the findings provide valuable insights for managers and policymakers in port organizations and similar operational settings, particularly in developing countries, to improve performance through effective administrative systems, competence development, and employee engagement strategies.

This study is grounded in several established theoretical frameworks. Weber's theory of bureaucracy provides the foundation for understanding how formal administrative structures influence organizational efficiency and control. Human capital and competence theories emphasize the importance of employee knowledge, skills, and attitudes in achieving organizational objectives. In addition, the Job Demands-Resources model explains how psychological factors such as work engagement enhance the impact of organizational resources on performance outcomes.

Previous empirical studies generally indicate that bureaucratic administration and human resource competence have positive effects on organizational performance, although the strength of these relationships may vary across organizational contexts. Research on work engagement suggests that engaged employees are more motivated, productive, and capable of utilizing organizational resources effectively. However, studies that explicitly examine work engagement as a moderating variable in the relationship between administrative systems, competence, and performance remain limited.

By situating the present study within this literature context, the research addresses an important gap and extends existing knowledge by providing empirical evidence from a port organization in Timor-Leste. The study thus offers a contextualized understanding of how bureaucratic administration, human resource competence, and work engagement jointly influence organizational performance.



2. LITERATURE REVIEW

2.1 Bureaucratic Administration and Organizational Performance

Bureaucratic administration has been a central concept in organizational theory since the work of Max Weber. Weber (1947) conceptualized bureaucracy as a rational system characterized by formal rules, hierarchical authority, specialization, and impersonality, designed to enhance efficiency and control within organizations. From this perspective, bureaucratic administration provides clarity in roles and responsibilities, reduces uncertainty, and promotes consistency in organizational processes.

Empirical studies have provided mixed evidence regarding the impact of bureaucratic administration on organizational performance. Several studies suggest that well-implemented bureaucratic systems can improve performance by enhancing coordination, accountability, and procedural clarity (Adler & Borys, 1996; Olsen, 2006). In public and operational organizations, bureaucracy is often associated with improved compliance with regulations and standardized service delivery.

However, other studies criticize excessive bureaucracy for creating rigidity, slowing decision-making processes, and limiting organizational flexibility (Mintzberg, 1983; Bozeman & Feeney, 2011). In dynamic operational environments such as ports, where rapid coordination and responsiveness are required, overly rigid bureaucratic procedures may hinder performance rather than enhance it. This suggests that the relationship between bureaucratic administration and organizational performance is context-dependent and may vary based on how bureaucratic systems are designed and implemented.

Despite extensive theoretical discussion, empirical research examining bureaucratic administration in port operations, particularly in developing countries, remains limited. Most existing studies focus on public sector organizations in developed economies, leaving a gap in understanding how bureaucratic administration affects performance in operational infrastructures such as ports in emerging contexts.

2.2 Human Resource Competence and Organizational Performance

Human resource competence is widely recognized as a critical determinant of organizational performance. Competence generally refers to a combination of knowledge, skills, abilities, and work attitudes that enable employees to perform effectively (Boyatzis, 1982; Spencer & Spencer, 1993). From a resource-based view, competent human resources represent a strategic asset that can create sustainable competitive advantage (Barney, 1991).

Numerous empirical studies have demonstrated a positive relationship between human resource competence and organizational performance. Organizations with higher levels of employee competence tend to exhibit better productivity, service quality, and adaptability to environmental changes (Delaney & Huselid, 1996; Wright et al., 2001). In operational settings, competent employees are essential for minimizing errors, ensuring safety, and maintaining service reliability.

Nevertheless, some studies argue that competence alone may not automatically translate into improved performance if organizational systems and motivation are weak (Lepak et al., 2006). Without supportive administrative structures and motivational mechanisms, employee competencies may be underutilized. This highlights the importance of examining competence in conjunction with organizational and psychological factors.

In the context of port operations, empirical studies focusing specifically on human resource competence are relatively scarce. Existing research often addresses technical efficiency or infrastructure capacity, rather than human resource capabilities. This gap underscores the need to investigate how human resource competence contributes to organizational performance in port organizations, particularly within developing economies.

2.3 Work Engagement and Organizational Performance

Work engagement has gained increasing attention in organizational psychology as a positive and proactive state of work-related well-being. Schaufeli et al. (2002) define work engagement as a persistent and pervasive affective-cognitive state characterized by vigor, dedication, and absorption. The Job Demands–Resources (JD-R) model posits that work engagement arises when employees have access to sufficient job resources, which in turn leads to positive outcomes such as improved performance (Bakker & Demerouti, 2017).

Empirical evidence consistently supports the positive relationship between work engagement and performance at both individual and organizational levels. Engaged employees tend to demonstrate higher levels of motivation, commitment, and discretionary effort, which contribute to improved task performance and organizational outcomes (Rich et al., 2010; Bakker et al., 2014).



However, much of the existing literature examines work engagement as a direct predictor of performance rather than as a moderating variable. Fewer studies have explored how work engagement interacts with organizational resources, such as administrative systems and employee competence, to influence performance. This represents a theoretical gap, particularly in operational and public sector contexts where structural and human resource factors play a significant role.

2.4 Work Engagement as a Moderating Variable

The moderating role of work engagement is grounded in the JD-R model, which suggests that psychological resources can strengthen the impact of job and organizational resources on performance outcomes (Bakker & Demerouti, 2017). In this context, work engagement may enhance the effectiveness of bureaucratic administration by encouraging employees to comply with procedures proactively rather than mechanically.

Similarly, work engagement may strengthen the relationship between human resource competence and organizational performance. Competent employees who are highly engaged are more likely to apply their skills effectively, demonstrate initiative, and contribute to organizational goals. Conversely, competent but disengaged employees may underutilize their capabilities, resulting in suboptimal performance outcomes.

Empirical studies examining moderating effects of work engagement remain limited, particularly in operational sectors such as ports. Most prior research focuses on mediation mechanisms or direct effects, leaving a gap in understanding how engagement interacts with administrative and competence-related factors. Therefore, investigating work engagement as a moderating variable provides a novel contribution to the literature.

2.5 Research Gap and Hypothesis Development

Based on the critical review of related work, several gaps can be identified. First, empirical studies examining bureaucratic administration and organizational performance in port organizations, particularly in developing countries, are scarce. Second, the interaction between human resource competence and organizational performance has not been sufficiently explored in operational infrastructure contexts. Third, the moderating role of work engagement in strengthening these relationships remains underexplored. To address these gaps, this study proposes the following hypotheses:

- H1: Bureaucratic administration has a positive effect on organizational performance.
- H2: Human resource competence has a positive effect on organizational performance.
- H3: Work engagement moderates the relationship between bureaucratic administration and organizational performance.
- H4: Work engagement moderates the relationship between human resource competence and organizational performance.

3. METHODOLOGY

3.1 Research Design

This study employed a quantitative explanatory research design to examine the causal relationships between bureaucratic administration, human resource competence, and organizational performance, with work engagement positioned as a moderating variable. The explanatory approach was selected because the study aims to test hypotheses derived from established theories and previous empirical findings, rather than merely describing organizational phenomena.

A cross-sectional survey design was used, whereby data were collected at a single point in time from employees working in the Operational Department of Timor Port Tibar. This design is appropriate for examining relationships among latent variables and assessing the strength and direction of causal paths within a structural model. The research framework integrates organizational theory, human resource management perspectives, and the Job Demands-Resources model to provide a comprehensive explanation of organizational performance.

3.2 Data Collection Methods

Primary data were collected using a structured questionnaire administered to employees of the Operational Department of Timor Port Tibar. The questionnaire was designed to capture respondent's perceptions of bureaucratic administration, human resource competence, work engagement, and organizational performance. All items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).



The data collection process was conducted with the cooperation of organizational management to ensure access to respondents and facilitate a high response rate. Prior to distribution, the questionnaire was reviewed to ensure clarity, relevance, and alignment with the research objectives. Respondents were informed of the academic purpose of the study and assured of the confidentiality and anonymity of their responses to minimize response bias.

3.3 Tools and Techniques Used

The research instruments were developed by adapting measurement items from previous validated studies to ensure content validity. Bureaucratic administration was measured using indicators reflecting formalization, hierarchical structure, and procedural clarity. Human resource competence was assessed through indicators related to knowledge, skills, and work attitudes. Work engagement was measured using indicators of vigor, dedication, and absorption, while organizational performance was evaluated based on efficiency, effectiveness, and service quality dimensions.

Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. PLS-SEM was selected due to its suitability for complex research models involving multiple latent constructs and moderating effects. In addition, PLS-SEM does not require strict assumptions of data normality and is appropriate for relatively small to medium sample sizes, making it suitable for the context of this study.

3.4 Sample Size and Analysis Methods

The study population consisted of all employees working in the Operational Department of Timor Port Tibar. A census or saturated sampling technique was applied, whereby all accessible employees were invited to participate in the survey. This approach was chosen to obtain a comprehensive representation of the operational workforce and reduce sampling bias.

The data analysis process involved two main stages. First, the measurement model was evaluated to assess construct reliability and validity, including indicator reliability (outer loadings), internal consistency reliability (composite reliability), convergent validity (average variance extracted), and discriminant validity. Second, the structural model was analyzed to test the proposed hypotheses by examining path coefficients, t-values, and p-values using a bootstrapping procedure.

To assess the moderating effects of work engagement, interaction terms were created and incorporated into the structural model. The significance of the moderating relationships was evaluated based on the statistical significance of the interaction paths. This analytical approach provides robust empirical evidence regarding both direct and moderating effects within the proposed research framework.

4. RESULTS AND DISCUSSION

4.1 Respondent Profile

This section presents the demographic characteristics of respondents involved in the study. Understanding respondent profiles is important to provide context for interpreting the research findings and to ensure that the sample adequately represents the operational workforce at Timor Port Tibar.

Table 1. Respondent Demographic Profile

No	Category	Choice	Number	Percentage
1	Gender	Male	92	84.40%
		Female	17	15.60%
2	Age	18-25 years	38	34.86%
		26-36 years	50	45.87%
		37-45 years	16	14.68%
		>45 years	5	4.59%
3	Final Education	High School	53	48.62%
		Diploma	26	23.85%
		Bachelor's Degree	30	27.52%
4	Years of service	1-3 years	106	97.25%
		4-7 years	3	2.75%



5	Department	Heavy Equipment	35	32.11%
		Gate In	15	13.76%
		Gate Out	16	14.68%
		Shore Handling	29	26.61%
		Planning	7	6.42%
		Quality Safety Environment	7	6.42%

Source: Primary data processed by the author (2025)

The respondent profile indicates a diverse composition in terms of gender, age, educational background, job position, and years of service. This diversity reflects the actual structure of the operational workforce and supports the generalizability of the findings within the organizational context of Timor Port Tibar.

4.2 Measurement Model Evaluation

The measurement model was evaluated to assess the reliability and validity of the research constructs before testing the structural relationships. The evaluation focused on indicator reliability, internal consistency reliability, convergent validity, and discriminant validity.

Measurement Model Evaluation (Outer Loadings, AVE, and Composite Reliability)

Table 2 Outer Loadings, AVE, and Composite Reliability

Construct	Indicator	Outer Loading	AVE	Composite Reliability
Bureaucratic Administration (X1)	X1.1	0.671	0.518	0.865
	X1.2	0.794		
	X1.3	0.751		
	X1.4	0.701		
	X1.5	0.729		
	X1.6	0.664		
Human Resource Competence (X2)	X2.1	0.829	0.655	0.850
	X2.2	0.860		
	X2.3	0.734		
Work Engagement (Z1)	Z1.1	0.678	0.487	0.824
	Z1.2	0.886		
	Z1.3	0.789		
Organizational Performance (Y1)	Y1.1	0.695	0.622	0.830
	Y1.2	0.783		
	Y1.3	0.760		
	Y1.4	0.701		
	Y1.5	0.520		

Source: Primary data processed by the author (2025)

The measurement model was evaluated to assess indicator reliability, convergent validity, and internal consistency reliability. Indicator reliability was examined through outer loading values, while convergent validity and internal consistency were assessed using Average Variance Extracted (AVE) and Composite Reliability (CR), respectively.

For the bureaucratic administration construct (X1), the outer loading values ranged from 0.664 to 0.794. Indicators X1.2, X1.3, X1.4, and X1.5 demonstrated loadings above the recommended threshold of 0.70, indicating satisfactory indicator reliability.

Although indicators X1.1 (0.671) and X1.6 (0.664) were slightly below the threshold, they were retained due to their conceptual relevance to the construct. The AVE value for bureaucratic administration was 0.518, exceeding the minimum criterion of 0.50, which confirms adequate convergent validity. Furthermore, the composite reliability value of 0.865 indicates strong internal consistency reliability for this construct.

The human resource competence construct (X2) exhibited strong indicator reliability, with outer loading values ranging from 0.734 to 0.860, all exceeding the recommended threshold of 0.70. This indicates that all indicators reliably represent the construct. The AVE value of 0.655 demonstrates satisfactory convergent validity, while the composite reliability value of 0.850 confirms a high level of internal consistency reliability.

For the work engagement construct (Z1), the outer loading values ranged from 0.678 to 0.886. Indicator Z1.2 showed a high loading value, while Z1.1 and Z1.3 exhibited acceptable loadings. The AVE value for work engagement was 0.487, which is slightly below the recommended threshold of 0.50. However, this value is considered acceptable because the composite reliability value of 0.824 exceeds the minimum requirement of 0.70, indicating adequate internal consistency reliability. This condition aligns with methodological recommendations that constructs with AVE values below 0.50 may still be retained if composite reliability is satisfactory.

The organizational performance construct (Y1) showed outer loading values ranging from 0.520 to 0.783. Indicators Y1.2, Y1.3, and Y1.4 demonstrated loadings above 0.70, while Y1.1 (0.695) and Y1.5 (0.520) showed lower values but were retained due to their theoretical importance in capturing organizational performance dimensions. The AVE value of 0.622 confirms adequate convergent validity, and the composite reliability value of 0.830 indicates satisfactory internal consistency reliability.

Overall, the results of the measurement model evaluation indicate that all constructs demonstrate acceptable levels of indicator reliability, convergent validity, and internal consistency reliability. Therefore, the measurement model is considered adequate, and the structural model analysis can be conducted.

4.3 Structural Model Evaluation

After establishing the adequacy of the measurement model, the structural model was evaluated to examine the hypothesized relationships among constructs. The analysis focused on path coefficients, t-values, and p-values obtained through the bootstrapping procedure.

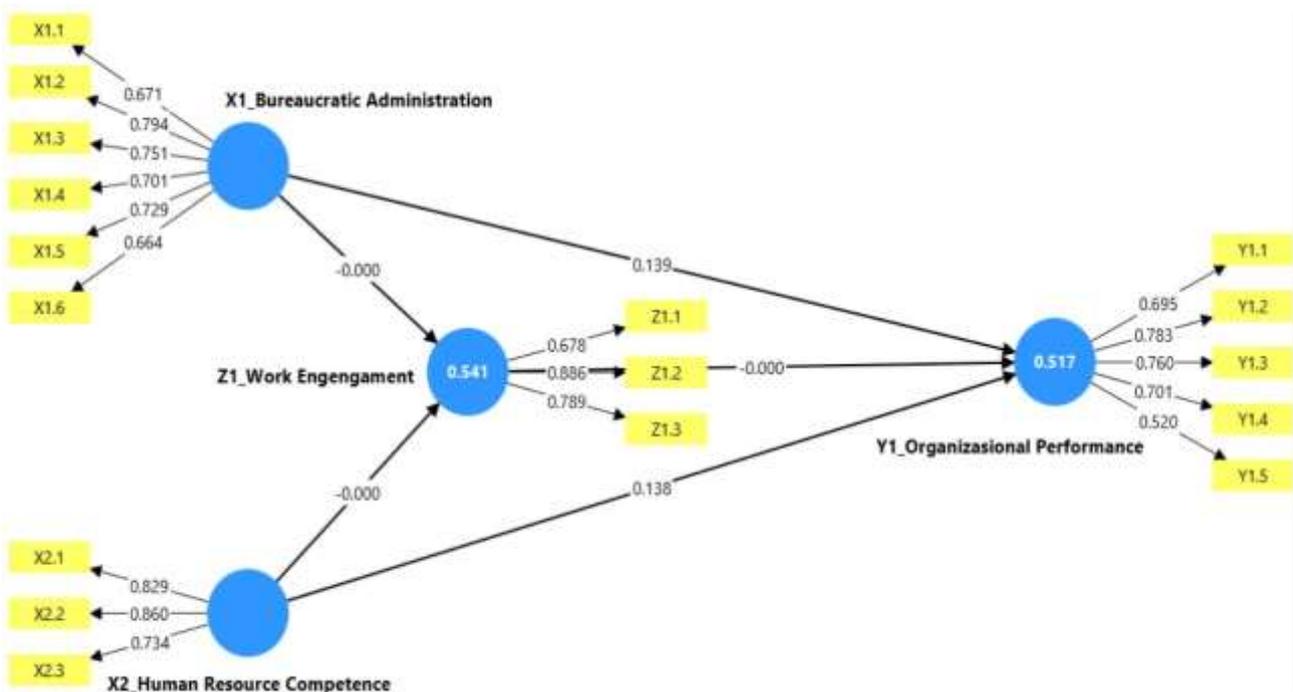


Figure 1. Structural Model Results (Path Diagram)

Source: Primary data processed by the author (2025)



Structural Model Path Coefficients

Table 3 Direct Effect

Path Coefficient-List					
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (IO/STDEVI)	P-Values
X1_Bureaucracy Administration>>Y_Organizational Performance	0.525	0.528	0.092	5.713	0
X2_Human Resource Competence>>Y_Organizational Performance	0.25	0.252	0.103	2.435	0.015

Source: Primary data processed by the author (2025)

Based on the structural model results presented in Table 3, bureaucratic administration has a positive and significant effect on organizational performance. This finding indicates that a well-structured bureaucratic system contributes to improving coordination, accountability, and efficiency within organizational operations. The presence of clear procedures, standardized regulations, and hierarchical authority enables employees to perform their tasks more systematically and effectively. Consequently, the improvement of bureaucratic administration can lead to better organizational performance outcomes.

Furthermore, the results also show that human resource competence positively influences organizational performance. Employees who possess adequate knowledge, skills, and professional attitudes are able to perform their tasks more efficiently and adapt to operational challenges. In the context of port operations, competent employees contribute to improving service quality, operational accuracy, and decision-making effectiveness.

These findings are consistent with the theory of bureaucracy proposed by Weber and the human resource competence theory, which emphasize that organizational systems and individual capabilities are key determinants of organizational performance.

Table 4 Specific Indirect Effects

<i>Specific indirect effects-Mean, STDEV, T values, p values</i>					
	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T statistic (O/STDEV)</i>	<i>P values</i>
X1_Bureaucracy Administration>>Z1_Work engagement>>Y_Organisational Performance	0.139	0.142	0.052	2.659	0.008
X2_Human Resource Competence>>Z_Work engagement>>Y_Organizational Performance	0.138	0.139	0.046	3.007	0.003

Source: Primary data processed by the author (2025)

In addition to the direct relationships, this study also examines the moderating role of work engagement in strengthening the relationship between bureaucratic administration, human resource competence, and organizational performance.

The analysis results indicate that work engagement significantly moderates the relationship between bureaucratic administration and organizational performance. This finding suggests that the effectiveness of bureaucratic administration in improving

organizational performance becomes stronger when employees demonstrate a high level of engagement with their work. Employees who are psychologically engaged tend to show higher dedication, energy, and concentration, which enhance the implementation of administrative procedures and organizational policies.

Similarly, work engagement also moderates the relationship between human resource competence and organizational performance. This means that competent employees will contribute more significantly to organizational performance when they are highly engaged in their work. Work engagement encourages employees to utilize their knowledge and skills more effectively in achieving organizational goals.

These results support the Job Demands–Resources (JD-R) model, which states that psychological resources such as work engagement can strengthen the impact of job resources on performance outcomes. Therefore, organizations should not only focus on improving administrative systems and employee competence but also foster employee engagement to maximize organizational performance.

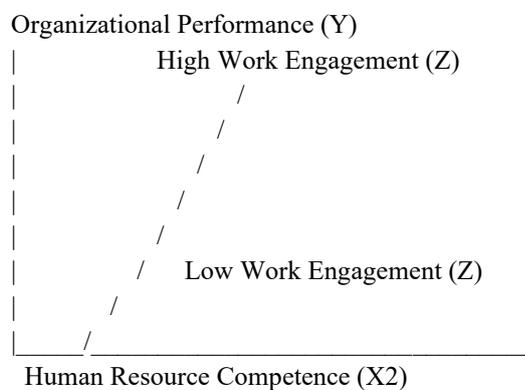


Figure 2 Simple Slope Analysis of Work Engagement Moderation

Figure 2 illustrates that when work engagement is high, the positive relationship between human resource competence (X2) and organizational performance (Y) becomes stronger. In contrast, when work engagement is low, the relationship between human resource competence (X2) and organizational performance (Y) becomes weaker.

4.4 Discussion of Findings

The findings of this study provide empirical support for Weber’s theory of bureaucracy, which emphasizes the importance of formalized administrative structures in improving organizational efficiency. The results show that bureaucratic administration has a positive effect on organizational performance. This indicates that well-structured administrative systems can enhance coordination, clarity of procedures, and accountability within the organization. In the context of port operations, clear administrative mechanisms help ensure that operational activities are carried out systematically and in accordance with established standards. Consequently, effective bureaucratic administration contributes to improving the overall performance of the organization.

The significant influence of human resource competence on organizational performance is consistent with human capital theory, which highlights the strategic role of employee capabilities in achieving organizational goals. Employees who possess higher levels of competence are better able to perform their tasks effectively, solve operational problems, and maintain service quality. In port operations, where many activities involve technical procedures and safety considerations, employee competence becomes particularly crucial. Therefore, organizations that invest in developing employee skills and knowledge are more likely to achieve higher levels of organizational performance.

The results also indicate that work engagement plays an important role in improving organizational performance. Employees who demonstrate high levels of engagement tend to show greater dedication, enthusiasm, and commitment to their work. Such employees are more willing to contribute beyond their formal responsibilities and actively support organizational objectives. In operational environments such as port management, engaged employees are more attentive to work procedures, more responsive to operational challenges, and more motivated to maintain service quality. As a result, work engagement becomes an important psychological factor that supports improved organizational performance.



Furthermore, the moderating role of work engagement highlights the importance of psychological resources in strengthening the relationship between human resource competence and organizational performance. Consistent with the Job Demands–Resources (JD-R) model, work engagement enhances the positive impact of human resource competence on organizational performance. Employees who are highly engaged tend to utilize their competencies more effectively, enabling them to contribute more significantly to the achievement of organizational objectives.

To further illustrate the moderating role of work engagement, a simple slope analysis was conducted to visualize the interaction effect between human resource competence and organizational performance at different levels of work engagement. Figure 2 shows that when work engagement is high, the positive relationship between human resource competence and organizational performance becomes stronger. In contrast, when work engagement is low, the relationship between competence and organizational performance becomes weaker.

This finding indicates that work engagement enhances the effectiveness of employee competencies in improving organizational performance. Employees who are highly engaged are more likely to apply their knowledge and skills effectively in performing their duties. Consequently, the interaction between competence and engagement plays a crucial role in strengthening organizational performance outcomes. Moreover, this result further supports the Job Demands–Resources (JD-R) model, which suggests that psychological resources such as work engagement can strengthen the influence of job resources on performance outcomes.

4.5 Implications of the Findings

From a managerial perspective, the findings imply that improving organizational performance requires more than structural reforms or training programs alone. Managers should ensure that bureaucratic procedures are designed to support, rather than hinder, operational efficiency. In addition, investments in human resource development should be accompanied by initiatives that promote work engagement, such as supportive leadership, recognition, and meaningful work design.

From a theoretical perspective, this study contributes to organizational and human resource management literature by providing empirical evidence of the moderating role of work engagement. The integration of bureaucratic theory, competence-based perspectives, and the JD-R model offers a more comprehensive explanation of organizational performance in operational settings.

5. CONCLUSION

5.1 Summary of Key Findings

This study examined the influence of bureaucratic administration and human resource competence on organizational performance, with work engagement serving as a moderating variable, within the context of the Operational Department of Timor Port Tibar. Using a quantitative explanatory approach and Partial Least Squares–Structural Equation Modeling (PLS-SEM), the study provides several important findings.

First, bureaucratic administration was found to have a positive and significant effect on organizational performance. This result indicates that well-structured administrative systems characterized by clear procedures, formalized rules, and effective coordination contribute to improved operational outcomes. Second, human resource competence also demonstrated a positive and significant influence on organizational performance, highlighting the importance of employees' knowledge, skills, and work attitudes in achieving organizational objectives.

Third, work engagement was found to significantly moderate the relationship between bureaucratic administration and organizational performance. This finding suggests that administrative systems are more effective in enhancing performance when employees are psychologically engaged in their work. Fourth, work engagement also strengthened the relationship between human resource competence and organizational performance, indicating that competent employees are more likely to translate their capabilities into performance outcomes when they are highly engaged. Overall, the findings confirm that organizational performance is best achieved through the combined influence of effective administrative structures, competent human resources, and high levels of employee engagement.

5.2 Research Implications

From a theoretical perspective, this study contributes to organizational and human resource management literature by integrating bureaucratic theory, competence-based perspectives, and the Job Demands–Resources (JD-R) model to explain organizational performance. The empirical evidence supporting the moderating role of work engagement extends existing research that has



primarily focused on direct relationships. By demonstrating how engagement strengthens the effects of administrative and competence-related factors, this study offers a more nuanced understanding of performance mechanisms in organizational settings. From a practical perspective, the findings provide valuable insights for managers and policymakers, particularly in port organizations and similar operational environments. Organizational leaders should focus on designing bureaucratic systems that support efficiency without creating excessive rigidity. In addition, continuous investment in human resource development is essential to ensure that employees possess the competencies required for effective performance. Importantly, organizations should implement strategies to foster work engagement, such as supportive leadership, recognition, and meaningful job design, to maximize the impact of administrative and human resource initiatives on organizational performance.

5.3 Limitations and Future Scope

Despite its contributions, this study has several limitations that should be acknowledged. First, the research was conducted within a single organizational context, which may limit the generalizability of the findings to other organizations or industries. Second, the use of a cross-sectional research design restricts the ability to draw causal inferences over time. Third, the study relied on self-reported data, which may be subject to common method bias and respondent subjectivity.

Future research is encouraged to address these limitations by examining similar research models across different organizational contexts and industries, including private sector and multinational organizations. Longitudinal research designs could provide deeper insights into causal relationships and changes in organizational performance over time. Additionally, future studies may incorporate additional variables, such as leadership style, organizational culture, or technological capability, to further enrich understanding of the factors influencing organizational performance.

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