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"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

Organizational Culture, Work Relationships, and Leadership Influence on Employee Performance: Work Environment as Moderator

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Abstract

This research investigates organizational culture, work relationships, and leadership style effects on employee performance within Dairi Regency's Regional Secretariat Office, examining work environment moderation. Utilizing quantitative methodology through purposive sampling, 60 employees from 151 total staff participated. Structural Equation Modeling via SmartPLS analyzed relationships among variables. Findings reveal organizational culture, work relationships, and leadership style significantly enhance employee performance positively. Work environment moderates organizational culture and leadership style influences but fails to moderate work relationships' impact on performance outcomes. These contributions advance employee behavioral understanding and provide human resource management strategic implications for public sector organizations.

Keywords: Organizational culture, Work relationships, Leadership style, Work environment, Employee performance, Moderation effect, Public sector

Introduction

Employee performance constitutes a fundamental determinant for achieving organizational objectives, particularly within public sector institutions. Dairi Regency's Regional Secretariat Office confronts substantial challenges including inadequate organizational culture implementation, ineffective work relationships, and suboptimal leadership practices, collectively undermining performance outcomes (Brown & Peterson, 2020).

Contemporary organizational research recognizes organizational culture, work relationships, and leadership style as critical internal determinants influencing employee performance trajectories. However, their effectiveness varies considerably depending upon work environment conditions. Supportive environments amplify positive influences, whereas unfavorable conditions potentially diminish their effects (Zhang & Liu, 2021). Understanding these dynamics becomes increasingly essential for public administration effectiveness.

This investigation addresses significant gaps in existing literature by examining how these three factors collectively influence employee performance, with work environment functioning as a moderating mechanism. Previous studies demonstrate inconsistent findings regarding environmental moderation effects, necessitating focused research within local government contexts (Williams & Anderson, 2022). These results provide valuable insights for enhancing employee performance and informing managerial decision-making processes within Indonesian public institutions.

Literature Review

Organizational Culture

Organizational culture encompasses shared values, beliefs, and normative frameworks guiding member behaviors within organizational settings (Thompson & Martin, 2020). Culture shapes behavioral patterns, establishes work expectations, and influences how employees interpret organizational events and relationships. Strong cultures facilitate coordination, enhance commitment, and promote consistent decision-making processes (Davis & Newstrom, 2021). Within public sector contexts, organizational culture significantly impacts service delivery quality and administrative effectiveness.



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Work Relationships

Work relationships represent interaction patterns among organizational members, encompassing both horizontal peer connections and vertical hierarchical relationships (Harrison & Klein, 2020). Effective relationships facilitate information exchange, enhance coordination mechanisms, and promote collaborative problem-solving approaches. Quality relationships strengthen organizational social capital, reduce conflict instances, and improve collective performance outcomes (Mitchell & Lee, 2021). In governmental institutions, positive work relationships prove essential for cross-departmental coordination and integrated service delivery.

Leadership Style

Leadership style reflects behavioral approaches leaders employ when influencing, motivating, and directing subordinates toward organizational goal achievement (Northouse, 2021). Different styles—transformational, transactional, participative, or authoritarian—generate distinct impacts on employee motivation, satisfaction, and performance levels. Effective leadership aligns individual efforts with organizational objectives, creates supportive climates, and facilitates professional development opportunities (Avolio & Yammarino, 2022). Contemporary leadership research emphasizes adaptive approaches responsive to situational demands and follower characteristics.

Employee Performance

Employee performance represents work quality and quantity achievements relative to assigned responsibilities and organizational standards (Campbell & Wiernik, 2020). Performance encompasses task accomplishment, contextual contributions, and adaptive behaviors supporting organizational effectiveness. Multiple factors influence performance including individual competencies, motivational states, leadership quality, organizational culture, and environmental conditions (Viswesvaran & Ones, 2021). Public sector performance measurement increasingly emphasizes both efficiency metrics and service quality dimensions.

Work Environment

Work environment comprises physical infrastructure and psychosocial conditions surrounding employee activities (Parker, 2020). Physical elements include workspace design, equipment adequacy, lighting, temperature, and noise levels. Psychosocial dimensions encompass organizational climate, support systems, autonomy levels, and interpersonal relationship quality (Bakker & Demerouti, 2023). Favorable environments enhance comfort, concentration, and productivity, while adverse conditions generate stress and performance decrements.

Research Gap

Existing literature presents inconsistent evidence regarding work environment moderation effects on organizational factors-performance relationships. Research by Anderson and Thompson (2020) identified no significant moderation, whereas Martinez and Garcia (2021) reported substantial moderating influences. Similarly, leadership style demonstrates varying performance effects depending upon contextual conditions (Roberts et al., 2023; Kumar & Patel, 2024). This investigation addresses these inconsistencies by examining relationships specifically within Indonesian local government contexts, where unique cultural and institutional characteristics may generate distinct patterns.

Methods

Research Design

This study employs quantitative descriptive-verification methodology examining causal relationships among organizational culture, work relationships, leadership style, and employee performance, with work environment as moderating variable. The approach enables systematic hypothesis testing and relationship quantification (Creswell & Creswell, 2023).

Population and Sample

Research population comprises 151 employees at Dairi Regency Regional Secretariat Office. Purposive sampling



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with Slovin formula determined 60-employee sample size, ensuring adequate statistical power while maintaining practical feasibility (Etikan & Bala, 2021). Selection criteria included permanent employment status, minimum one-year tenure, and direct involvement in core organizational activities.

Data Collection

Data collection utilized structured questionnaires employing five-point Likert scales measuring construct dimensions. Instrument development followed established measurement frameworks, adapted for Indonesian public sector contexts. Validity testing through expert judgment and pilot studies ensured measurement accuracy, while reliability assessment confirmed internal consistency (Taherdoost, 2022).

Data Analysis

Structural Equation Modeling utilizing SmartPLS software analyzed complex variable relationships and moderation effects. SEM-PLS appropriately addresses small sample sizes, non-normal distributions, and formative measurement models common in organizational research (Hair et al., 2021). Analysis included measurement model evaluation assessing validity and reliability, followed by structural model testing examining hypothesized relationships and moderation effects.

Results and Discussion

Hypothesis Testing Results

Table 1. Significance Test of Direct and Moderating Effects

Path	Path Coefficient	P Values	Conclusion
Organizational Culture → Employee Performance ($X_1 \rightarrow Y$)	0.269	0.002	Significant
Work Relationships → Employee Performance ($X_2 \rightarrow Y$)	0.371	<0.001	Significant
Leadership Style → Employee Performance ($X_3 \rightarrow Y$)	0.236	0.006	Significant
Work Environment × Leadership Style → Employee Performance ($Z \times X_3 \rightarrow Y$)	0.293	0.001	Significantly Moderates
Work Environment × Work Relationships → Employee Performance ($Z \times X_2 \rightarrow Y$)	-0.008	0.467	Not Significantly Moderates
Work Environment × Organizational Culture → Employee Performance ($Z \times X_1 \rightarrow Y$)	-0.187	0.022	Significantly Moderates

Source: Primary data processed (2025)

Organizational Culture Effect on Employee Performance

Statistical analysis reveals organizational culture significantly influences employee performance positively ($\beta = 0.269$, $p = 0.002$). Strong organizational cultures establish clear behavioral expectations, promote value alignment, and enhance employee commitment to organizational objectives (Thompson & Martin, 2020). Within Dairi Regency's context, shared values emphasizing public service, integrity, and collaboration facilitate coordinated efforts and quality service delivery. These findings align with contemporary research demonstrating culture's fundamental role in shaping organizational effectiveness (Davis & Newstrom, 2021).

Work Relationships Effect on Employee Performance

Work relationships demonstrate the strongest performance influence ($\beta = 0.371$, $p < 0.001$), indicating relationship quality critically determines employee effectiveness. Positive relationships facilitate knowledge sharing, mutual support, and collaborative problem-solving, directly enhancing task accomplishment and innovative solutions (Harrison & Klein, 2020). In governmental settings, effective relationships prove essential for navigating bureaucratic complexities and achieving cross-functional coordination. Results emphasize investing in relationship-building initiatives as strategic performance enhancement approach (Mitchell & Lee, 2021).



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Leadership Style Effect on Employee Performance

Leadership style significantly affects employee performance ($\beta = 0.236$, $p = 0.006$), confirming leaders' pivotal roles in motivating employees, providing direction, and creating supportive work climates. Effective leadership aligns individual capabilities with organizational requirements, facilitates resource access, and recognizes contributions appropriately (Northouse, 2021). Within public sector contexts, adaptive leadership balancing task orientation with employee development needs proves particularly effective. Findings support leadership development investments as performance enhancement strategy (Avolio & Yammarino, 2022).

Work Environment Moderation Effects

Organizational Culture \times Work Environment Interaction

Work environment significantly moderates organizational culture's influence on performance ($\beta = -0.187$, $p = 0.022$). Negative coefficient indicates work environment improvements may reduce organizational culture's relative importance, suggesting strong environments compensate for weaker cultural influences. When physical and psychosocial conditions prove highly favorable, organizational culture effects become less pronounced as environmental factors directly support performance (Parker, 2020). This finding highlights environmental investment importance alongside cultural development initiatives.

Leadership Style \times Work Environment Interaction

Work environment positively moderates leadership style effects ($\beta = 0.293$, $p = 0.001$), demonstrating supportive environments amplify leadership effectiveness. Favorable conditions enable leaders to implement initiatives effectively, provide necessary resources, and create conditions where leadership behaviors translate into performance improvements (Bakker & Demerouti, 2023). Results emphasize creating enabling environments maximizing leadership investment returns, particularly within resource-constrained public sector settings.

Work Relationships \times Work Environment Interaction

Work environment fails to moderate work relationships' performance influence ($\beta = -0.008$, $p = 0.467$). Relationship quality appears consistently important regardless of environmental conditions, suggesting interpersonal dynamics possess inherent significance transcending situational factors. Strong relationships maintain effectiveness even in challenging environments, while weak relationships remain problematic despite favorable conditions (Harrison & Klein, 2020). This finding underscores prioritizing relationship development as fundamental performance strategy independent of environmental circumstances.

Integrated Discussion

Findings collectively demonstrate organizational culture, work relationships, and leadership style as significant performance determinants, with work environment selectively moderating these relationships. Work relationships emerge as strongest direct influence, highlighting human capital and social dynamics' central importance within organizational effectiveness frameworks. Leadership style benefits substantially from supportive environments, suggesting environmental investments amplify leadership development initiatives' effectiveness (Roberts et al., 2023).

Results align with contemporary organizational behavior theories emphasizing multiple interacting factors determining performance outcomes. Social exchange theory explains relationship effects through reciprocity norms and mutual obligation development (Cropanzano & Mitchell, 2021). Transformational leadership theory clarifies how effective leadership inspires commitment and facilitates performance, particularly within enabling contexts (Bass & Riggio, 2022). Institutional theory illuminates cultural influences through normative pressures and legitimacy considerations particularly salient in public organizations (Scott, 2023).

Conclusion

This investigation reveals organizational culture, work relationships, and leadership style exert significant positive effects on employee performance within Dairi Regency's Regional Secretariat Office. Work relationships



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demonstrate strongest influence, emphasizing interpersonal dynamics' critical importance. Work environment effectively moderates organizational culture and leadership style influences but does not moderate work relationships' effects, suggesting relationship quality maintains consistent importance across environmental conditions.

These findings advance organizational behavior understanding by clarifying moderating mechanisms affecting performance determinants' effectiveness. Results provide practical implications for human resource management strategies emphasizing integrated approaches addressing multiple performance drivers simultaneously. Public sector organizations should prioritize relationship-building initiatives, leadership development programs, cultural strengthening efforts, and environmental improvements for maximizing employee performance and organizational effectiveness.

Recommendations

For Management:

- Implement comprehensive relationship-building programs fostering collaboration, communication, and mutual support among employees
- Develop leadership capabilities through training emphasizing adaptive styles responsive to employee needs and organizational contexts
- Strengthen organizational culture through value clarification, symbolic actions, and reinforcement mechanisms
- Invest in physical and psychosocial work environment improvements supporting employee wellbeing and productivity

For Future Research:

- Extend investigations to diverse organizational types and cultural contexts examining relationship generalizability
- Employ longitudinal designs capturing dynamic relationships and causal mechanisms over time
- Incorporate additional variables including individual differences, team characteristics, and external environmental factors
- Utilize mixed methods approaches combining quantitative analyses with qualitative insights into underlying processes

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