

The Influence of Organizational Culture, Leadership and Motivation on Human Resource Development with Continuous Improvement as a Moderating Variable at the Regional Secretariat Medan City

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Abstract

This study is motivated by the importance of human resource development in improving public organizational performance, particularly at the Regional Secretariat of Medan City, which still faces issues such as low employee motivation, suboptimal leadership, and inconsistent implementation of organizational culture. The objective of this study is to analyze the influence of organizational culture, leadership, and motivation on human resource development, with continuous improvement as a moderating variable. The research employs a quantitative approach using an associative method, with a saturated sample of 213 civil servants. Data were collected through questionnaires and analyzed using SEM-PLS with SmartPLS software. The results indicate that organizational culture, leadership, and motivation have a positive and significant effect on human resource development, with motivation as the most dominant variable. Furthermore, continuous improvement significantly strengthens the relationship between independent and dependent variables. The R-square value of 0.968 indicates a strong explanatory power of the model. The study concludes that enhancing organizational culture, leadership quality, and work motivation, supported by systematic continuous improvement, can effectively optimize human resource development.

Keywords: Organizational Culture, Leadership, Motivation, Human Resource Development.

INTRODUCTION

In the era of bureaucratic transformation and government digitalization, human resource development is one of the key factors for the success of public organizations (Akbar et al., 2025; Febiri et al., 2024; Plesner et al., 2018; Prayogo et al., 2025; Sunarso, 2025; Zolak Poljašević et al., 2025). Human resources who are competent, have integrity, and are adaptive to change will determine the effectiveness of the implementation of public duties and services (Sedarmayanti, 2022). Local governments, including the Medan City Regional Secretariat, are required to have apparatuses that not only understand administrative tasks but are also able to innovate and improve their performance in a sustainable manner. However, challenges such as low morale, weak coordination between departments, and mismatches between employee competencies and organizational needs remain frequent obstacles in human resource development. Human resource development (HRD) is an important aspect of improving the performance of public sector organizations. Within the Medan City Regional Secretariat, human resource development is directed toward realizing a competent apparatus with integrity that is adaptive to change. However, based on data from the personnel sector, the number of employees who have participated in training over the last three years tends to fluctuate and overall decline, namely 41 people in 2022, 13 people in 2023, and only 26 people in 2024. This condition indicates that efforts to improve competence have not been running optimally (Latifah & Safrida, 2025; Ryan & Moller, 2017).

In addition, the results of a pre-survey of 40 civil servants showed that 57.5% of respondents felt that the leadership style of their superiors had not fully encouraged increased motivation and work responsibility (Khine, 2024; Nawawi et al., 2023; Perangin-angin et al., 2022). This has had an impact on performance achievements that have not been maximized, as seen in the 2024 performance realization report, which reached only 82% of the set target. Organizational culture plays an important role in shaping the behavior and work values of the apparatus. A strong organizational culture can foster a sense of belonging, commitment, and a collaborative spirit at work (Robbins & Judge, 2019). In the government environment, a work culture oriented toward public service and integrity will encourage the creation of a professional apparatus. However, if organizational culture is not managed properly, resistance to change, weak communication, and low innovation in improving service quality may arise (Wibowo, 2022). In addition to organizational culture, leadership factors also have a significant influence on human resource development. An effective leadership style is able to direct, guide, and motivate employees to achieve organizational goals (Handoko, 2017). Visionary and participatory leaders will encourage the creation of a work environment that supports learning and the improvement of employee competencies. On the other hand, authoritarian and less communicative leadership can reduce morale, cause conflicts, and hinder the human resource development process (Gibson et al., 2021). Work motivation is also an internal factor that greatly determines the success of human resource development. Employees who have high motivation tend to show better performance, demonstrate initiative, and strive to improve their abilities (Kasmir, 2018). In the context of regional bureaucracy, motivation can be influenced by various aspects such as rewards, career development opportunities, and a supportive work climate. Therefore, increasing motivation must be an integral part of the human resource development strategy within the Medan City Regional Secretariat.

Furthermore, the success of human resource development depends not only on organizational culture, leadership, and motivation but also on the application of continuous improvement as a moderating factor. Continuous improvement is a systematic approach to continuously enhancing processes, work quality, and employee competencies (Goetsch & Davis, 2014). With a culture of continuous improvement, organizations can continue to adapt to changing strategic environments and improve the effectiveness of HRD management. Therefore, this research is important to analyze the extent to which organizational culture, leadership, and motivation affect human resource development, as well as how continuous improvement strengthens this relationship at the Medan City Regional Secretariat.

Based on the identified problems, it can be seen that inconsistencies in the implementation of organizational culture values—such as discipline, responsibility, and cooperation—less participatory leadership styles, and low employee motivation, particularly due to limited rewards and career development opportunities, have collectively hindered optimal human resource development at the Regional Secretariat of Medan City. In addition, human resource development programs, including training, education, and coaching, have not been implemented in a structured and sustainable manner, resulting in uneven competency improvement among employees.

Continuous improvement efforts have also not yet been institutionalized as part of the organizational culture, as innovation and performance evaluation remain incidental rather than systematic. Therefore, this study formulates key questions regarding the influence of organizational culture, leadership, and motivation on human resource development, both directly and through continuous improvement as a moderating variable. Accordingly, the main objective of this research is to analyze and determine the positive and significant effects of these variables—organizational culture, leadership, motivation, and continuous improvement—on human resource development within the Regional Secretariat of Medan City.

METHOD

This study used a quantitative approach with an associative research method, aiming to determine the influence or relationship between two or more variables (Sugiyono, 2019). The quantitative approach was selected because the study tested relationships between variables in a measurable manner using questionnaire-based instruments analyzed through statistical methods. This research was conducted at the Regional Secretariat of Medan City from October to December 2025, covering the stages of preparation, questionnaire distribution, data collection, data analysis, and report writing.

The population in this study consisted of all State Civil Apparatus (ASN) employees working within the Regional Secretariat of Medan City, totaling 213 individuals. Given that the population size exceeded 100, a saturated sampling technique was applied, in which all 213 employees were included as respondents (Sugiyono, 2019). This study used quantitative data obtained from questionnaire responses to measure the influence among the variables studied: organizational culture, leadership, motivation, human resource development, and continuous improvement. The data sources included primary data collected directly from ASN employees through questionnaires, reflecting their perceptions and responses to the research variables, and secondary data obtained from official documents, personnel reports, organizational records, and relevant literature to support the analysis.

Data were collected using several techniques. The primary method involved distributing questionnaires to ASN employees within the Regional Secretariat of Medan City. The instrument was developed based on indicators of the research variables: organizational culture, leadership, motivation, human resource development, and continuous improvement. A five-point Likert scale was used to measure responses, ranging from strongly disagree (1) to strongly agree (5). The questionnaires were distributed both offline and online to ensure broad participation. In addition, limited semi-structured interviews were conducted with selected officials and personnel staff to obtain additional insights into human resource development policies and the implementation of continuous improvement. Documentation data, including employee records, organizational structure, HR development program documents, and performance reports, were also collected to support and contextualize the findings from the questionnaires and interviews.

According to Sugiyono (2016), a variable refers to an attribute or characteristic of a subject that varies and can be measured. This study involved independent variables, a dependent variable, and a moderating variable.

Table 1. Variable Operational Definition

Variable	Operational Definition	Indicators
Human Resources Development (Y)	Kasmir (2018) stated that human resource development is an effort made by organizations to improve the ability of employees to be able to carry out their work better through education and training, guidance, and work rotation	Cashmere (2018) 1) Increased knowledge. 2) Skill improvement. 3) Improvement of attitudes and behaviors. 4) Improvement of work ability. 5) Readiness to face job changes (<i>adaptability</i>).
Continuous Improvement (Z)	Schermerhom (2018) in general, the concept of sustainable improvement is the process of continuously finding ways to improve the efficiency and productivity of an organization.	Schermerhom (2018) 1) Management and <i>Leadership Commitment</i> 2) Employee <i>Involvement and Empowerment</i> 3) Learning and Development 4) Communication and <i>Feedback Systems</i> 5) Performance Measurement and Evaluation 6) Innovation and <i>Process Improvement</i>
Organizational Culture (X1)	According to Sulaksono (2019), organizational culture is "the overall values, norms, beliefs, and behavior patterns developed and maintained jointly by members of the organization, which are the foundation in decision-making and the implementation of daily activities in achieving common goals."	Sulaksono (2019), 1) Innovative risk calculation 1) Paying attention to every problem 2) Oriented towards the results to be achieved. 3) Oriented to all employee interests 4) Aggressive at work 5) Maintain and maintain work stability
Leadership (X2)	Handoko (2017) states that: " <i>Leadership is a person's ability to influence others to work towards achieving organizational goals and objectives with high enthusiasm and willpower.</i> "	Handoko (2017) 1) Directing Ability 2) Motivating Ability 3) Decision-Making Ability 4) Communication Ability 5) Role Model / Exemplary Behavior 6) Controlling and Evaluating Ability
Motivation (X3)	According to Kasmir (2018), work motivation is a process to encourage and move employees to have a high spirit to work together, work effectively, and be integrated in an effort to achieve company satisfaction and goals.	Cashmere (2018) 1) Hard work 2) Future orientation 3) High level of ambition 4) Task/goal orientation 5) Efforts to progress 6) Perseverance 7) Selected co-workers 8) Time utilization

Source of researcher 2025

The data analysis method in this study used a quantitative approach through inferential statistical analysis. The questionnaire results were processed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) to examine the influence of organizational culture, leadership, and motivation on human resource development, as well as the moderating role of continuous improvement. The analysis stages included testing the validity and reliability of the instrument, evaluating the outer model (loading factor, composite reliability, and average variance extracted), and evaluating the inner model through R^2 , path coefficients, and t-statistics using bootstrapping. Moderation analysis was conducted to assess changes in the strength of relationships between variables when continuous improvement was included as a moderating variable.

Instrument validity and reliability were first assessed through convergent validity, discriminant validity, and reliability testing. Convergent validity was evaluated based on loading factors greater than 0.7 and AVE values above 0.5. Discriminant validity was assessed using cross-loading values and the Fornell–Larcker criterion. Reliability was measured using composite reliability and Cronbach’s alpha, both of which were required to exceed 0.7.

The measurement model (outer model) was then evaluated to determine the relationship between indicators and latent constructs. Indicators that met validity and reliability criteria were considered capable of representing the latent variables adequately. Subsequently, the structural model (inner model) was analyzed to examine relationships between latent constructs using path coefficients. The R-square (R^2) value indicated the extent to which independent variables explained the dependent variable, while t-statistics and p-values were used to test the significance of the relationships. The criteria applied were t-statistics greater than 1.96 (significant at $\alpha = 0.05$) and p-values less than 0.05.

Furthermore, direct and indirect effect testing was conducted to determine whether job satisfaction acted as an intervening variable. Mediation was considered partial if the indirect effect was significant and the direct effect was reduced, while full mediation was indicated if the direct effect became insignificant.

In this study, data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS software, as this method is suitable for analyzing complex models and accommodating relatively small sample sizes.

The evaluation of the outer model (measurement model) focused on testing validity and reliability through convergent validity. This was assessed by examining the loading values of each indicator and the average variance extracted (AVE). Indicators with loading values above 0.7 were considered acceptable, while those with values between 0.40 and 0.70 were further evaluated based on their contribution to AVE and composite reliability. Indicators with loading values below 0.40 were removed from the model. The AVE threshold was set at 0.50, and composite reliability was required to exceed 0.70. Consideration was also given to retaining indicators that contributed to content validity. Table 2 presents the loading values for each indicator.

Table 2. Validity Testing by Loading Factor

	Organization al Culture (X1)	X1 Moderation Effect	X2 Moderation Effect	X3 Moderation Effect	Leadershi (X2)	Motivation (X3)	Human Resources Development (Y)	Continuous Improvement (Z)
Organizational Culture (X1) * Continuous Improvement (Z)		1.291						
Leadership (X2) * Continuous Improvement (Z)			1.242					
Motivation (X3) * Continuous Improvement (Z)				1.313				
X1.1	0.879							
X1.2	0.867							
X1.3	0.886							
X1.4	0.843							
X1.5	0.751							
X1.6	0.922							
X2.1					0.725			
X2.2					0.861			
X2.3					0.816			
X2.4					0.854			
X2.5					0.83			
X2.6					0.884			
X3.1						0.841		
X3.2						0.76		
X3.4						0.729		
X3.6						0.739		
X3.8						0.726		
Y1							0.907	
Y2							0.924	
Y3							0.899	
Y4							0.876	
Y5							0.802	
Z1								0.851
Z2								0.845
Z3								0.858
Z4								0.787
Z5								0.945
Z6								0.836

Source: Processed Smart PLS

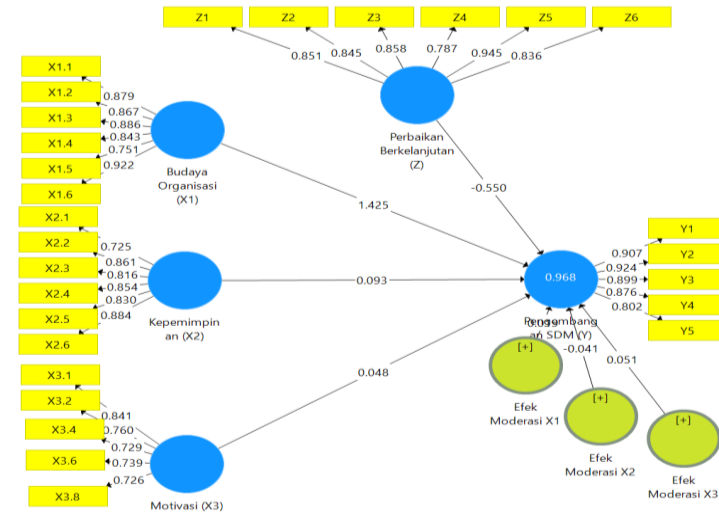


Figure 4.1 Validity Testing by Loading Factor

Based on the loading factor validity test in Table 4.2 and Figure 4.1, it is known that all loading values > 0.7 , which means that they have met the validity requirements based on the loading value. Furthermore, validity testing was carried out based on *the average variance extracted (AVE)* value.

Table 3. Validity Testing by *Average Variance Extracted (AVE)*

	Mean Variance Extracted (AVE)
Organizational Culture (X1)	0.739
X1 Moderation Effect	1.000
X2 Moderation Effect	1.000
X3 Moderation Effect	1.000
Leadership (X2)	0.689
Motivation (X3)	0.578
Human Resources Development (Y)	0.779
Continuous Improvement (Z)	0.731

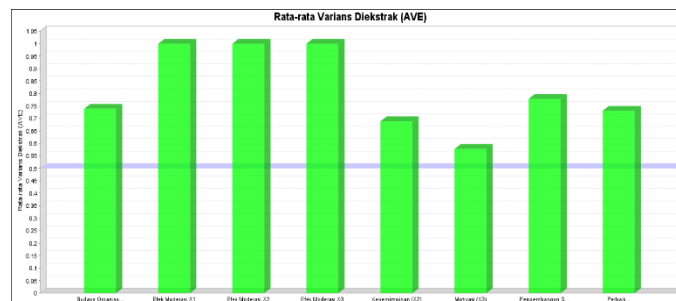


Figure 4.2 Validity Testing by *Average Variance Extracted (AVE)*

The recommended AVE value is above 0.5 (Mahfud and Ratmono, 2013). It is known that all AVE values > 0.5 , which means that they have met the validity requirements based on AVE. Furthermore, reliability testing was carried out based on *the composite reliability* (CR) value.

Table 4. Reliability Testing by Composite Reliability (CR)

	Composite Reliability
Organizational Culture (X1)	0.944
X1 Moderation Effect	1.000
X2 Moderation Effect	1.000
X3 Moderation Effect	1.000
Leadership (X2)	0.93
Motivation (X3)	0.872
Human Resources Development (Y)	0.946
Continuous Improvement (Z)	0.942

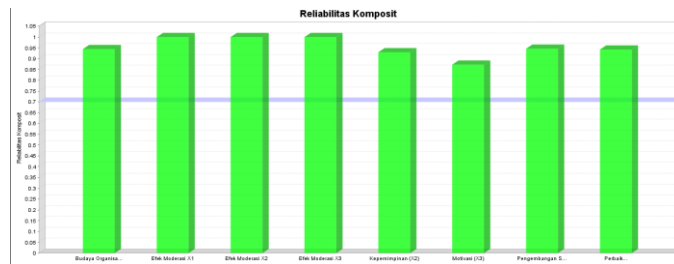


Figure 4.3 Reliability Testing by Composite Reliability (CR)

The recommended CR value is above 0.7 (Mahfud and Ratmono, 2013). It is known that all CR values are > 0.7 , which means that they have met the reliability requirements based on CR. Next, reliability testing was carried out based on *Cronbach's alpha* (CA) value.

Table 5. Reliability Testing by Cronbach's Alpha (CA)

	Cronbach's Alpha
Organizational Culture (X1)	0.929
X1 Moderation Effect	1.000
X2 Moderation Effect	1.000
X3 Moderation Effect	1.000
Leadership (X2)	0.912
Motivation (X3)	0.816
Human Resources Development (Y)	0.928
Continuous Improvement (Z)	0.926

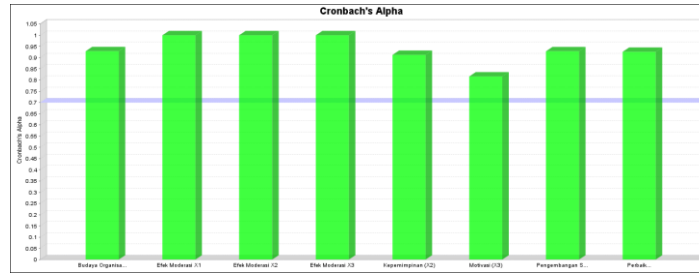


Figure 4.4 Reliability Testing based on Cronbach's Alpha (CA)

The recommended CA value is above 0.7 (Mahfud and Ratmono, 2013). It is known that all CA values > 0.7, which means that they have met the reliability requirements based on Cronbach's alpha. Next, a discriminatory validity test was carried out using the Fornell-Larcker approach. Table 6 presents the results of the discriminant validity test.

Table 6. Discriminant Validity Testing

	Organizational Culture (X1)	X1 Moderation Effect	X2 Moderation Effect	X3 Moderation Effect	Leadership (X2)	Motivation (X3)	Human Resources Development (Y)	Continuous Improvement (Z)
Organizational Culture (X1)	$\sqrt{AVE_{X1}} = 0.86$							
X1 Moderation Effect	-0.616	$\sqrt{AVE_{Moc}} = 1$						
X2 Moderation Effect	-0.407	0.863	$\sqrt{AVE_{Mod2}} = 1$					
X3 Moderation Effect	-0.391	0.761	0.815	$\sqrt{AVE_{Mod3}} = 1$				
Leadership (X2)	0.827	-0.391	-0.2	-0.208	$\sqrt{AVE_{X2}} = 0.83$			
Motivation (X3)	0.746	-0.398	-0.22	-0.37	0.807	$\sqrt{AVE_{X3}} = 0.76$		
Human Resources Development (Y)	0.975	-0.561	-0.352	-0.329	0.861	0.747	$\sqrt{AVE_Y} = 0.883$	
Continuous Improvement (Z)	0.986	-0.617	-0.421	-0.401	0.793	0.757	0.944	$\sqrt{AVE_Z} = 0.855$

Source: Processed Smart PLS

In discriminant validity testing, the square root value of AVE of a latent variable is compared to the correlation value between that latent variable and other latent variables. It is known that the square root value of AVE for each latent variable is greater than the correlation value between the

latent variable and other latent variables. So it is concluded that it has met the requirements for discriminatory validity.

4.3 Influence Significance Test (Boostrapping) (Hypothesis Test) (Inner Model)

Table 7 presents the results of the significance test of influence.

Table 7. Test Path Coefficient & Significance Influence

	Original Sample (O)	Sample Average (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Organizational Culture (X1) -> HR Development (Y)	1.425	1.428	0.131	10.849	0.000
Moderation Effect X1 -> Human Resources Development (Y)	1.291	1.288	0.118	10.927	0.000
Moderation Effect X2 -> Human Resources Development (Y)	1.242	1.237	0.068	18.274	0.000
Moderation Effect X3 -> HR Development (Y)	1.313	1.303	0.079	16.705	0.000
Leadership (X2) -> HR Development (Y)	0.093	0.107	0.045	2.067	0.039
Motivation (X3) -> HR Development (Y)	0.841	0.839	0.035	23.739	0.000
Continuous Improvement (Z) -> HR Development (Y)	0.55	0.564	0.14	3.99	0.000

Source: SmartPLS Processed

Based on the results in Table 4.7, the results were obtained:

1. Organizational Culture (X1) → HR Development (Y)
Based on the test results, a path coefficient value of 1,425 was obtained with a Statistical T value of 10,849 and a P Value of 0,000. A P value smaller than 0.05 indicates that the influence of Organizational Culture on HR Development is positive and significant. This means that the better the organizational culture that is applied, the higher the level of human resource development in the organizational environment.
2. The Effect of Moderation X1 → Human Resources Development (Y)
The path coefficient of 1.291 with a Statistical T of 10.927 and P Values of 0.000 shows that the effect of moderation X1 has a significant positive effect on HR Development. This means that the moderation variables related to X1 strengthen the relationship between Organizational Culture and HR Development, so that consistent cultural implementation will further strengthen HR development results.
3. The Effect of Moderation X2 → Human Resources Development (Y)
The coefficient value of 1,242 with a Statistical T of 18,274 and P Values of 0.000 shows that the effect of moderation X2 also has a significant positive effect on human resource development. This indicates that the existence of moderation variables in the relationship between Leadership and Human Resources Development further strengthens the positive influence that occurs.

4. The Effect of Moderation X3 → Human Resources Development (Y)
 The result of a coefficient of 1,313 with a Statistical T of 16,705 and a P Values of 0,000 shows that the effect of moderation X3 has a significant positive effect on Human Resource Development.
 Thus, the moderation variable X3 plays a role in strengthening the relationship between Motivation and Human Resources Development.
5. Leadership (X2) → HR Development (Y)
 The path coefficient value of 0.093, Statistical T 2.067, and P Values 0.039 show that Leadership has a positive and significant influence on Human Resources Development.
 Although the influence value is relatively small compared to other variables, these results show that an effective leadership style still contributes to improving human resource development.
6. Motivation (X3) → HR Development (Y)
 Based on the results of the analysis, the path coefficient value was 0.841 with a Statistical T of 23.739 and a P Values of 0.000. This value shows that Motivation has a significant positive effect on Human Resources Development.
 Thus, the higher the motivation of employees, the more efforts and results of human resource development in the organization will increase. This variable also has the strongest influence among other variables
7. Continuous Improvement (Z) → Human Resources Development (Y)
 With an original sample (*O*) of 0.55, *T-statistic* of 3.99 > 1.96, and a *P-value* of 0.000, Continuous Improvement has a significant positive effect on Human Resource Development. This shows that evaluation and continuous improvement programs within organizations can increase the effectiveness of human resource development, especially in adapting to changes and improving performance.

Table 8. R-Square

	R Square	Adjusted R Square
Human Resources Development (Y)	0.968	0.967

It is known that the R-Square value of HR Development (Y) is 0.968, which means that organizational culture (X1), leadership (X2), motivation (X3) and continuous improvement (Z) are able to affect human resource development (Y) by 96.8%. The *Adjusted R Square* value for HR development (Y) is 0.967. Since *the Adjusted R Square* = 0.967 > 0, it is concluded that organizational culture (X1), leadership (X2), motivation (X3) and continuous improvement (Z) have predictive relevance for human resource development (Y).

Table 9. Testing the Goodness of Fit Model

Saturated Models	
SRMR	0.134
d_ULS	7.239
d_G	Not used
Chi-Square	Unlimited
NFI	Not used

It is known that based on the results of *the SRMR goodness of fit* test, the SRMR value = 0.134 < 0.1, it is concluded that the model has FIT.

RESULT AND DISCUSSION

The results of the study indicate that organizational culture, leadership, and motivation each have a positive and significant influence on human resource development at the Regional Secretariat of Medan City. Using the Moderated Regression Analysis (MRA) technique on data collected from 213 ASN employees, the following findings were obtained:

1. Organizational Culture → Human Resource Development; Organizational culture shows a strong positive influence with a regression coefficient of 1.425, a T-statistic of 10.849, and a P-value of 0.000. This result confirms that the stronger and more supportive the organizational culture, the more effective the development of human resources within the institution.
2. Leadership → Human Resource Development; Leadership demonstrates a significant but moderate effect with a coefficient of 0.093, a T-value of 2.067, and a P-value of 0.039. This indicates that participatory and supportive leadership contributes positively to HR development, although its magnitude is smaller compared to the other variables.
3. Motivation → Human Resource Development; Motivation exhibits the strongest influence with a coefficient of 0.841, a T-statistic of 23.739, and a P-value of 0.000. Higher motivation among employees significantly enhances the development of their competencies and performance.
4. Continuous Improvement → Human Resource Development; Continuous improvement also significantly affects HR development, with a coefficient of 0.55, a T-statistic of 3.99, and a P-value of 0.000, emphasizing the importance of ongoing systematic improvement efforts.
5. Moderating Effect of Continuous Improvement; Continuous improvement is proven to strengthen the relationship between organizational culture, leadership, and motivation on HR development. The moderating effect shows high significance (P-value 0.000), indicating that continuous improvement amplifies the positive influence of all three antecedent variables.

The Influence of Organizational Culture on Human Resources Development

The results of the study show that organizational culture has a positive and significant influence on the development of human resources (HR) in the Regional Secretariat of Medan City. This indicates that the values, norms, and work habits embedded in the organization are able to encourage employees to improve their abilities and professionalism. A collaborative, disciplined, and public service-oriented work culture creates an environment conducive to employee learning and innovation. These findings are in line with the opinion of Sedarmayanti (2022) and Robbins & Judge (2019) who stated that a strong organizational culture can strengthen employee commitment to self-development and the achievement of organizational goals. Thus, strengthening a positive organizational culture is an important foundation in building adaptive, creative, and high-integrity human resources in the local government bureaucratic environment.

The Influence of Leadership on Human Resources Development

The results of the analysis show that leadership also has a significant effect on human resource development. The leadership style applied by the leadership at the Medan City Regional Secretariat, especially in terms of communication, motivation, and employee empowerment, is able to increase work morale and employees' desire to continue learning and developing. Leaders who are able to be exemplary, open to new ideas, and provide constructive feedback encourage the emergence of a learning culture in the workplace. This supports Wibowo's (2022) view that leaders play a role as facilitators of learning and the main driver of organizational change. Thus, leadership effectiveness is a key factor in ensuring the success of employee competency and career development programs.

The Influence of Motivation on Human Resources Development

Work motivation has been proven to have a significant influence on human resource development. Employees who have high intrinsic motivation, such as a desire to excel, a sense of responsibility, and commitment to the organization, are more active in participating in training, improving skills, and innovating at work. Conversely, when extrinsic motivations such as rewards, promotions, and incentives are also given fairly, work morale and participation in development programs increase. These results are consistent with the motivation theory of Gibson et al. (2021) and Handoko (2017) which emphasize that motivation is the main driver in optimizing the potential of human resources.

This means that the higher the motivation of employees, the greater their contribution to the development of competencies and overall organizational performance.

The Role of Continuous Improvement as a Moderating Variable

Continuous improvement has been proven to strengthen the relationship between organizational culture, leadership, and motivation for human resource development. The implementation of the Kaizen principle, which is continuous improvement through evaluation, innovation, and employee involvement, makes every element of the organization always strive to improve work effectiveness and efficiency. When the spirit of continuous improvement is inherent in all employees, then the values of organizational culture, participatory leadership style, and motivation are not only temporary, but systemic and sustainable. These findings support the view

of Imai (2015) and Goetsch & Davis (2016) that continuous improvement can strengthen commitment to organizational learning and continuous improvement of human resources. Thus, this variable serves as a catalyst that accelerates the transformation of work culture towards an adaptive and highly competitive organization.

Managerial Implications

Based on the results of the study, several practical implications can be conveyed:

1. Strengthening organizational culture needs to be directed at innovative, collaborative, and accountable values to support sustainable human resource development.
2. Improving the quality of leadership through managerial training and coaching will expand the capacity of leaders in fostering employees.
3. The implementation of a fair and transparent motivation system can increase employee participation in training programs and improve competencies.

Building a continuous improvement system that involves all levels of employees to ensure that human resource development runs effectively and is relevant to the demands of the times.

CONCLUSION

Based on the research results, it can be concluded that organizational culture, leadership, motivation, and continuous improvement all have positive and significant effects on human resource development, with motivation emerging as the strongest predictor, followed by organizational culture and continuous improvement, while leadership shows a comparatively smaller yet still significant influence. In addition, the moderating effects tested in the model consistently strengthened the relationships between organizational culture, leadership, and motivation on human resource development, indicating that the presence of moderating variables enhances these effects. The findings highlight that improving employee motivation, supported by a strong organizational culture, effective leadership, and continuous improvement practices, can significantly enhance human resource development outcomes. For future research, it is recommended to explore additional variables such as job satisfaction, organizational commitment, or digital competency, as well as to apply a larger and more diverse sample or different institutional contexts to improve the generalizability and depth of the findings.

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