



The Role of Motivational Climate and Career Development as Determinants of Job Performance among Primary Health Care Workers

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INTRODUCTION

Primary health care (PHC) plays a fundamental role in ensuring the sustainability of health systems and achieving universal health coverage (World Health Organization, 2022). Community health centers are expected to provide accessible, equitable, and high-quality primary health care services. These services are mainly supported by the performance of health workers. Health workers are considered the main providers of health services. It has been shown by many studies that health worker performance strongly influences service quality, organizational efficiency, and population health outcomes, especially in low- and middle-income countries (Dubale et al., 2019; Franco et al., 2002; West et al., 2018).

A major workforce crisis is currently being faced by health systems around the world. It is projected that a shortage of nearly 10 million health and care workers will be experienced by 2030, especially in low- and middle-income countries (Boniol et al., 2022; WHO, 2022). In addition to workforce shortages, excessive workloads, occupational stress, and burnout are increasingly experienced by health professionals. Workforce sustainability and service quality can be affected by these problems. Evidence from WHO indicates that the COVID-19 pandemic further exacerbated psychological distress among health workers, contributing to increased rates of burnout, absenteeism, and turnover intentions worldwide (WHO, 2022; WHO, 2023). Global concerns have been increased by these challenges. The ability of primary health care systems to maintain effective service delivery and achieve Universal Health Coverage (UHC) targets can be affected.

In Indonesia, health workforce challenges are still faced, especially in primary health care settings. Unequal distribution of health professionals and shortages in several important occupational groups are still experienced. Because of these problems, the ability of community health centers to provide comprehensive and high-quality services can be affected. Service effectiveness can be limited by these workforce gaps. Workload pressure can also be increased, and the performance and retention of health workers can be affected (World Health Organization, 2024; Ministry of Health of Indonesia, 2024).

In recent years, human resource challenges in the health sector have become more complex. Workforce shortages, increasing service demands, and organizational constraints have placed great pressure on primary health care workers. These pressures may reduce work performance and increase burnout if not adequately addressed (Dubale et al., 2019; Wen et al., 2026). Recent studies from different countries have shown that organizational and motivational factors are important predictors of workforce productivity and sustainability in primary health care (PHC) settings (Assele et al., 2025; Muhula et al., 2025).

Work motivation has long been recognized as a central determinant of employee performance. Based on job characteristics theory and social exchange theory, intrinsic motivation is increased by supportive leadership, recognition, and meaningful job roles. Better work outcomes are then achieved through this increased motivation (Blau, 2017; Hackman & Oldham, 1976). In health care organizations, a motivational climate is defined as employees' shared perceptions of organizational practices, performance expectations, and support. An important role in employee performance is played by a positive motivational climate. Higher engagement, lower turnover intention, and better job performance are also shown by previous

studies to be associated with a positive motivational climate (Fernandes et al., 2025; Legesse et al., 2025).

In addition to motivational climate, career development is considered an important part of health workforce management. Structured training systems, competency-based promotion, and clear professional pathways are recognized as ways to increase employee engagement and improve job performance (Junejo et al., 2025; Widi & Kusuma, 2024). It is suggested by health systems research that opportunities for professional growth improve individual competence. Employee retention and organizational commitment are also strengthened by these opportunities, especially in primary health care facilities where opportunities for career advancement are often limited (Ghasemi & Shakerian, 2025; Yang et al., 2026).

Despite growing evidence on health workforce management, the factors affecting job performance are still not consistently identified across studies and organizational settings. Employee performance has been shown by previous studies to be influenced by motivation, leadership, organizational support, job satisfaction, and professional development (Assele et al., 2025; Muhula et al., 2025). However, different results have been reported because of differences in context, organization, and workforce characteristics. In addition, the effects of motivational climate and career development on job performance have not been widely examined together among primary health care workers, especially in Indonesia. This research gap should be addressed so that evidence-based workforce management strategies can be developed. Employee productivity and health service quality can also be improved through these strategies. Therefore, the influence of motivational climate and career development on job performance among primary health care workers in Dairi Regency, Indonesia, is examined in this study. In addition, the organizational factor that contributes more to employee performance is identified in this study. Empirical evidence for workforce management strategies in primary health care settings is also provided.

METHODS

A quantitative cross-sectional design was used in this study. The influence of motivational climate and career development on job performance among primary health care workers was examined. A cross-sectional approach was selected to assess the relationships among variables at a single point in time within organizational settings.

The study was conducted in 18 community health centers in Dairi Regency, North Sumatra, Indonesia. These health centers were selected because an important role in primary health care was played by them. Different health professionals and organizational structures

were also included. The population of this study comprised all health workers employed in community health centers in Dairi Regency, totaling 995 individuals. The sample was determined by using a proportional representation approach. Adequate participation from each community health center and each health professional category was ensured. Specifically, respondents were proportionally recruited from all 18 community health centers in Dairi Regency to ensure adequate representation of major health professional groups, representing key health professions including general practitioners, dentists, nurses, midwives, health promotion officers, epidemiologists, sanitarians, medical laboratory technologists, pharmacists, and nutritionists. This rule-of-thumb approach was adopted to ensure balanced representation across health centers and professional groups. A total sample of 350 respondents was obtained. The final sample size was considered adequate for multiple regression analysis. The commonly recommended minimum sample size for studies with two independent variables was also exceeded.

In this study, job performance was used as the dependent variable. Motivational climate and career development were used as the independent variables. Motivational climate was defined as employees' perceptions of organizational support, leadership encouragement, recognition, teamwork, and work-related motivation in the primary health care environment. This variable was measured using 10 questionnaire items adapted from organizational motivational climate indicators, including supervisory support, appreciation, communication, and work encouragement.

Career development was defined as employees' perceptions of opportunities for professional growth, competency improvement, training participation, and promotion systems in the organization. The variable was measured by using 10 items. Training access, promotion opportunities, career planning, and competency development were covered by these items. Job performance was defined as the extent to which professional responsibilities were performed effectively by health workers according to organizational standards. This variable was measured by using 12 items. Work quality, service effectiveness, punctuality, teamwork, and task completion were assessed by these items.

Data were collected by using structured questionnaires. The questionnaires were adapted from previously validated instruments. Motivational climate was measured using items adapted from the *Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2)* developed by Newton, Duda, and Yin (2000). Career development was assessed using items adapted from the *Career Development Questionnaire* developed and validated by Bruin and Bernard-Phera (2002). Job performance was measured by using a questionnaire. The

questionnaire was developed based on established employee performance indicators for primary health care settings. All questionnaire items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Before the main study, validity and reliability tests were conducted. The measurement instruments were evaluated. Good internal consistency was shown by the reliability analysis. Cronbach's alpha values of 0.811 for motivational climate, 0.868 for career development, and 0.867 for job performance were obtained. These values exceeded the recommended threshold of 0.70, indicating that all instruments were reliable for use in this study.

Data were analyzed by using descriptive and inferential statistical methods. Descriptive statistics were used to summarize the demographic and professional characteristics of the respondents. Frequency distributions, percentages, means, and standard deviations were calculated. To examine the influence of motivational climate and career development on job performance, multiple linear regression analysis was used. The simultaneous and partial effects of the independent variables on job performance were determined by this analysis.

Before the regression analysis, classical assumption tests were conducted. The validity of the model was checked. The normality of the residuals was assessed by using a normal probability plot. Multicollinearity was evaluated by using variance inflation factor (VIF) values. Heteroscedasticity was examined by using a residual scatterplot. A VIF value below 10 was considered acceptable, indicating the absence of multicollinearity. All statistical analyses were conducted at a significance level of 5% ($p < 0.05$).

As all variables were measured by using self-report questionnaires, procedural remedies were applied to reduce common method bias. Anonymity was assured, and clear instructions were provided. In addition, Harman's single-factor test was conducted to assess the presence of common method variance.

Ethical approval was obtained from the Health Research Ethics Committee of STIKes Kesdam I/Bukit Barisan, Indonesia (Approval Number: 025/KEPK/Kesdam/IX/2025). All participants provided informed consent prior to participation, and confidentiality and anonymity were maintained throughout the study.

RESULTS

A total of 350 health workers from 18 community health centers in Dairi Regency were included in this study. The demographic and professional characteristics of the respondents are presented in Table 1.

Table 1. Respondents Characteristics (N=350)

Characteristics	Category	n	%
Gender	Male	123	35.1
	Female	227	64.9
Age	20-40 years	225	64.3
	41-60 years	125	35.7
Health Profession	Health Workforce	350	100.0

Based on gender, the majority of the respondents were identified as female (n = 227; 64.9%), while 123 respondents (35.1%) were identified as male. Based on age, most respondents were included in the 20–40 years age group (n = 225; 64.3%). The remaining respondents were included in the 41–60 years age group (n = 125; 35.7%).

Table 2. Descriptive Statistics and Correlation Analysis

Variables	Mean	SD	1	2.
Motivational climate	3.82	0.64		
Career development	3.75	0.70	0.777**	
Job performance	4.01	0.58	0.719**	0.783**

Notes: Summary of correlations among variables ** $p < 0,01$

The results showed that a mean score of 3.82 (SD = 0.64) was obtained for motivational climate. A mean score of 3.75 (SD = 0.70) was obtained for career development. The highest mean score of 4.01 (SD = 0.58) was obtained for job performance. These findings suggest that motivational climate, career development, and job performance were generally perceived at relatively high levels by the respondents.

The results of the Pearson's correlation analysis showed that a positive and significant correlation was found between motivational climate and career development ($r=0.777$; $p<0.001$). A positive and significant correlation was also found between motivational climate and job performance ($r=0.719$; $p<0.001$). Career development was also positively and significantly correlated with job performance ($r=0.783$; $p<0.001$). These results indicate strong and significant positive relationships among the variables.

Before multiple linear regression analysis was conducted, the classical assumption tests were performed to assess the suitability of the data. The Shapiro–Wilk test indicated that the residuals were normally distributed ($p = 0.181$), confirming that the normality assumption was satisfied. Multicollinearity was assessed using the Variance Inflation Factor (VIF), with values of 2.53 for both motivational climate and career development, which were well below the recommended threshold of 10. Therefore, multicollinearity was not detected. Heteroscedasticity was evaluated using a residual scatterplot, which showed no substantial

pattern indicating serious heteroscedasticity. Overall, the regression model satisfied the required assumptions and was considered appropriate for subsequent analysis.

Table 3. Results for Multiple Linear Regression Analysis

Variables	B	SE B	β	R ²	F	
Constant	4.529	1.636				
Motivational climate	0.333	0.064	0.279**	0.644	0.641	286.398**
Career development	0.537	0.051	0.566**			

Notes: ** $p < 0.001$

A statistically significant regression model was obtained ($F=286.398$; $p < 0.001$). A significant portion of the variance in job performance was explained jointly by the independent variables. The coefficient of determination (R^2) was 0.644, indicating that 64.4% of the variance in job performance was explained by the motivational climate and career development.

A positive and significant effect on job performance was found for motivational climate ($B=0.333$; $\beta = 0.279$; $p < 0.001$). A positive and significant effect on job performance was also found for career development ($B=0.537$; $\beta=0.566$; $p < 0.001$). Based on the standardized beta coefficients, a stronger effect on job performance was shown by career development than by motivational climate. These findings show that important contributions to health worker performance were made by both organizational factors. The strongest effect in the model was shown by career development.

DISCUSSION

The influence of motivational climate and career development on job performance among primary health care workers was examined in this study. It was found that significant contributions to job performance were made by both organizational factors. The strongest effect was shown by career development. These findings indicate that an important role in workforce performance within primary health care settings is played by organizational conditions.

A significant effect of motivational climate was found. The important role of the organizational environment in workforce productivity was therefore confirmed. This finding is consistent with job characteristics theory (Hackman & Oldham, 1976). It is further explained by social exchange theory that greater commitment and better work behaviors are shown when organizational support is perceived by employees (Blau, 2017). In primary health care settings, where service delivery is highly dependent on coordination and professional responsibility, accountability and performance standards may be strengthened by a supportive motivational climate. These findings reinforce the proposition of Job

Characteristics Theory that supportive work environments enhance employees' intrinsic motivation, engagement, and performance. Likewise, it is suggested by Social Exchange Theory that organizational support is repaid by employees through positive attitudes and productive work behaviors. Therefore, motivational climate is viewed not only as a contextual factor but also as a mechanism through which organizational support is translated into better job performance.

These findings are consistent with recent international studies. It has been shown that health worker engagement and productivity are closely related to motivational factors. In studies conducted in Ethiopia, Iran, and several African countries, workforce performance was significantly predicted by organizational support, leadership practices, and positive work environments. Burnout among health professionals was also reduced (Legesse et al., 2025; Ghasemi & Shakerian, 2025; Muhula et al., 2025). Similarly, it has been shown by studies conducted in primary care settings in several countries that stronger job satisfaction, workforce engagement, and service quality are supported by a positive organizational climate (Fernandes et al., 2025; Wen et al., 2026). The consistency of these findings across different health systems suggests that motivational climate can be considered a universal organizational factor. Workforce performance may be influenced by it regardless of geographical or socioeconomic context.

More importantly, the strongest effect on job performance was shown by career development in this study. The strategic importance of structured professional growth in primary health care institutions was therefore highlighted. Opportunities for competency enhancement, training participation, and transparent promotion systems appear to function as long-term motivational drivers that encourage employees to improve their capabilities and maintain high levels of performance. The importance of career development as a strategic human resource management tool has also been supported by international studies. It has been shown by studies conducted in China, Iran, Pakistan, and other developing countries that employee productivity, organizational commitment, and workforce retention are improved by structured career development opportunities (Yang et al., 2026; Ghasemi & Shakerian, 2025; Junejo et al., 2025). In primary health care organizations, a clearer sense of professional direction and future opportunities may be provided to employees through career development. Sustained effort and higher levels of job performance may therefore be encouraged.

The findings further suggest that an important role in job performance is played by organizational factors in primary health care settings. It has been shown by health workforce

studies that, in low- and middle-income countries, workforce performance is often influenced more by non-financial organizational factors, such as supervision quality, professional development systems, and career development, than by material incentives alone (Assele et al., 2025; Muhula et al., 2025). In settings where financial incentives and infrastructure are limited, job performance may be supported by formal systems of professional support and career advancement in primary health care institutions.

The stronger influence of career development than motivational climate provides an important managerial implication. Although day-to-day engagement and workplace satisfaction are improved by supportive work environments, a more lasting effect on professional behavior and productivity appears to be produced by structured career development systems. This finding supports human resource management literature emphasizing that development-oriented practices create long-term performance advantages by strengthening employees' perceived future prospects within the organization (Noe et al., 2019).

Although a new theory was not developed in this study, an extension of existing theoretical perspectives was provided in the context of primary health care workforce management. The findings suggest that career development may function as a more influential organizational determinant of job performance than motivational climate in Indonesian primary health care settings. Current understanding of social exchange theory and job characteristics theory is enriched by this finding. The important role of professional growth opportunities in shaping employee behavior and job performance within resource-constrained health systems is highlighted.

From a policy perspective, the importance of integrating career governance strategies into primary health care management is emphasized by these findings. Strengthening competency-based promotion frameworks, ensuring continuous professional development opportunities, and establishing transparent advancement criteria may enhance workforce performance more effectively than isolated motivational interventions. In practice, competency-based promotion frameworks should be included in workforce management systems by primary health care managers. Periodic competency assessments, individual career development plans, structured continuing professional development programs, and clear promotion criteria based on demonstrated competencies and professional achievements may be included in these frameworks. By aligning career advancement with competency attainment, community health centers can create sustainable professional pathways that strengthen workforce capability, increase employee motivation, and improve

organizational performance. This approach may be especially useful in Indonesian primary health care settings, where opportunities for career progression are often limited despite increasing service demands.

Overall, a contribution to the growing literature on health workforce management was made by this study. Motivational climate and career development were examined together as factors affecting job performance among primary health care workers. It was found that both factors are important. However, a stronger effect on employee performance appears to be shown by career development. The importance of investing in professional growth opportunities, competency-based promotion systems, and supportive organizational environments is highlighted by these findings. Workforce sustainability and service quality in primary health care settings may be strengthened through these efforts.

CONCLUSIONS

It was shown by this study that motivational climate and career development have positive and significant effects on the performance of health care workers. It was also shown that a large part of the variation in performance was explained by both variables, as indicated by a coefficient of determination of 0.644. In particular, a stronger effect was shown by career development than by motivational climate. It was indicated that health care worker performance is mainly improved by a structured career system and opportunities for professional growth.

It was confirmed by these findings that, although the performance of health care workers is rated relatively high, career development needs to be strengthened to improve engagement and productivity in a sustainable way. A positive motivational climate is still considered an important foundation for a supportive work environment. However, a stronger long-term effect on performance is produced when clear career paths, effective training programs, and competency-based promotion systems are provided by organizations.

Overall, improving healthcare worker performance requires an integrated human resource management approach, namely a combination of creating a conducive work climate and providing systematic career development. Important implications for health care organizations are provided by this strategy. Service effectiveness and public service quality may be improved through its implementation.

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