



Original research article

Quality of work life as a conditional mediator between organizational factors and job performance in a decentralized health system

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Abstract

Introduction: Quality of Work Life (QWL) is frequently conceptualized as a mediating mechanism linking organizational factors to employee job performance. However, empirical findings across health systems, particularly in decentralized settings, remain inconsistent. **Objectives:** This study investigates whether QWL mediates the relationships between organizational commitment, healthy work environment, motivational climate, career development, and job performance among health workers in decentralized primary health care systems.

Methods: Data were collected from 320 health workers working in local government primary health care facilities in Aceh, Indonesia. Structural Equation Modeling using the Partial Least Squares approach (PLS-SEM) was applied to examine direct and indirect relationships among the study variables.

Results: The results indicate that QWL functions as a selective mediator. QWL significantly mediates the effects of motivational climate and career development on job performance but does not mediate the relationships involving organizational commitment and healthy work environment.

Conclusion: These findings suggest that QWL functions as a conditional rather than a universal mediator in decentralized health systems.

Keywords: Decentralized health systems; Health workers; Job performance; Quality of work life

Introduction

The job performance of health workers is a critical determinant of the effectiveness and sustainability of health service delivery. In decentralized health systems, where authority and responsibility are transferred from central governments to local administrations, workforce performance becomes particularly salient. Decentralization is widely promoted as a strategy to improve efficiency, accountability, and service responsiveness; however, empirical evidence suggests that its implementation often generates complex challenges in human resource management. These challenges include fragmented employment policies, uneven managerial capacity across regions, and uncertainty in career development pathways for health workers. These conditions may weaken employee motivation, reduce organizational commitment, and ultimately undermine both individual performance and overall organizational effectiveness (Tsoufa et al., 2017; World Health Organization, 2020).

Within this decentralized context, understanding the organizational factors that shape the job performance of health

workers has become increasingly important. Contemporary human resource management literature emphasizes that employee job performance is not determined solely by technical competence or professional skills, but is also profoundly influenced by organizational conditions and psychosocial factors embedded in the work environment. Fragmented governance structures and heterogeneous employment arrangements, common in decentralized systems, shape daily work experiences and influence how health workers perceive their roles, opportunities, and organizational support. In this regard, QWL provides a critical conceptual lens for explaining how organizational contexts affect employee functioning beyond formal job requirements (Zulkarnain et al., 2024a).

From a theoretical perspective, the relationship between organizational conditions and employee performance can be explained through Social Exchange Theory and the Job Demands-Resources (JD-R) model. Social Exchange Theory posits that employees tend to reciprocate supportive organizational treatment with positive attitudes and behaviors that benefit the organization (Cropanzano and Mitchell, 2005). When organizations provide supportive work environments, fair pol-

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icies, and opportunities for professional growth, employees are more likely to develop positive perceptions of their work experiences and respond with greater effort and improved performance. Complementarily, the JD-R model suggests that organizational resources, such as supportive leadership, career development opportunities, and a positive motivational climate enhance employees' psychological well-being and work engagement, which subsequently improve job performance (Bakker and Demerouti, 2017).

Rooted in the principle of work humanization, QWL refers to the development of work environments that uphold employee dignity while enabling the utilization and development of individual skills and capacities (Behzad et al., 2014). From this perspective, QWL is not merely an outcome of favorable working conditions but a strategic organizational approach that fosters employee satisfaction, psychological well-being, and a sense of meaningful engagement at work. By promoting supportive, fair, and growth-oriented work environments, QWL may contribute to enhancing both individual effectiveness and overall organizational performance (Zulkarnain et al., 2024a). Consequently, QWL has increasingly been positioned in the literature as a central mechanism through which organizational factors translate into employee performance outcomes.

Beyond its immediate impact on work-related attitudes, QWL has also been shown to extend into broader life domains. Previous studies indicate that QWL influences not only job satisfaction but also overall life satisfaction, including employees' family life, social relationships, financial security, and general well-being (Chinomona and Dhurup, 2014). Organizations that offer higher levels of QWL are therefore more likely to attract, motivate, and retain a competent and committed workforce, gaining a strategic advantage in human resource management and long-term organizational sustainability (Zulkarnain et al., 2023b). These findings further reinforce the importance of QWL as a multidimensional construct linking organizational practices, employee well-being, and performance outcomes.

Despite extensive research highlighting the importance of QWL, empirical findings regarding its mediating role between organizational factors and employee performance remain inconsistent. Some studies suggest that organizational factors influence performance indirectly by enhancing employees' quality of work life, whereas others indicate that certain organizational conditions may exert direct effects on performance through structural, managerial, or operational mechanisms. These mixed findings suggest that QWL may not function as a universal mediating mechanism across all organizational determinants.

This issue becomes particularly relevant in decentralized health systems, where governance structures, employment arrangements, and institutional capacities vary substantially across regions. Under such conditions, the pathways through which organizational factors influence employee performance may differ depending on the specific nature of the organizational determinant. While some factors may operate through employees' perceptions of work life quality, others may influence performance through more direct organizational or structural mechanisms. Consequently, the mediating role of QWL may be better understood as contextual and conditional rather than universal.

Accordingly, this study aims to examine the mediating role of QWL in the relationships between organizational factors and health worker performance within a decentralized health system. Unlike previous studies that implicitly assume

QWL functions as a universal mediator, this study explicitly investigates whether QWL operates as a selective or conditional mediating mechanism across different organizational determinants. By empirically examining these differentiated mediation pathways, the study contributes to the literature by advancing theoretical understanding of how organizational conditions influence employee performance in decentralized health systems and by providing evidence-based insights for human resource management policies that extend beyond improving QWL alone.

Literature review

Health workers' job performance has been widely examined within the human resource management and health systems literature as a multidimensional outcome influenced by individual, organizational, and systemic factors. Empirical studies consistently demonstrate that job performance in health care settings cannot be explained solely by technical competence or clinical skills, but is also shaped by organizational arrangements, psychosocial work conditions, and broader institutional contexts (Dieleman et al., 2009; Franco et al., 2002; Lu et al., 2019). In public and decentralized health systems, these relationships tend to be more complex due to variations in governance structures, employment policies, and resource allocation across regions (Bossert and Mitchell, 2011; Tsofa et al., 2017).

In seeking to explain how organizational conditions translate into employee attitudes and performance, the literature has increasingly turned to QWL as a central explanatory construct. QWL broadly refers to employees' perceptions of well-being, fairness, job security, opportunities for professional development, social integration, and work-life balance. Its conceptual foundations are largely derived from Walton's (1973) framework and the multidimensional model proposed by Sirgy et al. (2001), both of which emphasize that work quality extends beyond physical working conditions to include psychological and social dimensions. Subsequent empirical research has reinforced the relevance of these dimensions in health care settings, where work is characterized by high emotional demands and professional responsibility (Brooks and Anderson, 2005; Van Laar et al., 2007).

Building on these conceptual foundations, a substantial number of studies report positive associations between QWL and desirable workforce outcomes, including job satisfaction, organizational commitment, retention, and performance among health workers (Lu et al., 2019; Nayeri et al., 2009; WHO, 2010). On the basis of these findings, QWL is frequently positioned as a mediating mechanism through which organizational factors such as organizational commitment, healthy work environment, motivational climate, and career development affect performance. This dominant perspective assumes that improvements in organizational conditions enhance employees' quality of work life, which subsequently leads to higher levels of performance (Nayak and Sahoo, 2015; Willis-Shattuck et al., 2008).

However, more recent empirical evidence suggests that the mediating role of QWL is not consistently observed across contexts. Several studies indicate that certain organizational factors may exert direct effects on performance without necessarily improving QWL, particularly in public-sector and resource-constrained health systems (Aiken et al., 2002; Hämmig, 2017; Wei et al., 2019). For example, research on healthy work environments highlights their critical role in ensuring patient safety and operational effectiveness, while showing weaker or inconsistent links with broader perceptions of work-related well-being (Aiken et al., 2018; Lake et al., 2019).

These findings suggest that some organizational conditions function primarily as operational enablers rather than as determinants of perceived work quality.

In contrast, organizational factors related to motivation and career development appear to demonstrate stronger and more stable relationships with both QWL and performance outcomes. Studies across diverse health care contexts show that opportunities for professional growth, recognition, and future career prospects are key determinants of how health workers evaluate their quality of work life (De Simone et al., 2018; Purohit and Bandyopadhyay, 2014; Van der Heijden et al., 2019). When such factors are present, QWL is more likely to operate as a psychological mechanism linking organizational practices to sustained performance. This pattern is particularly evident in professions where long-term commitment and professional identity are central, such as nursing and allied health occupations.

The relevance of these differentiated relationships becomes even more pronounced in decentralized health systems. Decentralization is often associated with fragmented authority, regional disparities in employment conditions, and limited central control over human resource policies. These structural characteristics may weaken the influence of affective organizational factors – such as organizational commitment – on QWL, while simultaneously increasing the importance of factors that are directly experienced by individuals, including motivational climate and career development opportunities (Dussault and Dubois, 2003; WHO, 2010, 2020). As a result, the effectiveness of QWL as a mediating mechanism may vary depending on the type of organizational determinant and the broader institutional context.

Materials and methods

Study design and participants

This study employed a quantitative explanatory research design to examine the causal relationships among latent constructs explaining health worker performance within decentralized health systems. The explanatory design was selected to test theoretically driven hypotheses concerning both direct and mediated relationships between organizational factors, QWL, and performance outcomes. Data were collected from health workers who had a minimum of one year of work experience and were directly involved in health service delivery, ensuring that respondents had sufficient exposure to organizational practices and working conditions relevant to the study variables.

Data collection and instruments

A total of 350 questionnaires were distributed to health workers across primary health care facilities. Of these, 320 valid questionnaires were returned, resulting in a response rate of 91.4%. Data were collected using a structured self-administered questionnaire adapted from previously validated instruments used in prior empirical studies. The questionnaire assessed organizational commitment, healthy work environment, motivational climate, career development, QWL, and health worker performance. All measurement items were rated on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to capture respondents' perceptions of organizational conditions and work experiences. The adaptation process involved contextual adjustments to ensure relevance to the decentralized health system setting while preserving the original construct validity of the instruments.

To ensure relevance to the local context, the measurement instruments were carefully adapted to reflect the characteristics of decentralized primary health care services. The adaptation process involved minor wording adjustments and contextual modifications to ensure that the items were understandable and applicable to the working conditions of health workers in the local health system. The adapted questionnaire was reviewed by experts in health management and organizational behavior to evaluate its content relevance and clarity. A pilot test was conducted with a small group of health workers to assess the clarity, reliability, and contextual appropriateness of the measurement items. Feedback from the pilot test was used to refine several statements before the main data collection. Prior to completing the questionnaire, participants were informed about the purpose of the study, the voluntary nature of participation, and the confidentiality of their responses. Informed consent was obtained from all participants, and questionnaires were completed anonymously to ensure the privacy and confidentiality of the respondents.

Data analysis

Data analysis was conducted using Structural Equation Modeling (SEM) with a Partial Least Squares (PLS) approach, implemented through Smart-PLS version 4. The PLS-SEM technique was chosen due to its suitability for theory development, predictive analysis, and the examination of complex models involving multiple latent variables and mediation effects. Model evaluation followed a two-step procedure, consisting of assessment of the measurement model (including indicator reliability, internal consistency reliability, convergent validity, and discriminant validity) and evaluation of the structural model (including path coefficients, coefficient of determination, and predictive relevance).

Hypothesis testing

Hypotheses were tested using a bootstrapping procedure with a resampling technique to estimate the significance of path coefficients and indirect effects. Statistical significance was determined based on *t*-values greater than 1.96 and *p*-values less than 0.05, corresponding to a 95% confidence level. This procedure enabled robust inference regarding both direct and mediated relationships among the study variables.

Ethical considerations

Ethical approval for this study was obtained from the Health Research Ethics Committee of Universitas Sumatera Utara (Approval Number: 931/KEPK/USU/2025).

Results

Respondents' characteristics

Table 1 presents the socio-demographic characteristics of the respondents. A total of 320 health workers participated in this study. The majority of respondents were female (66.3%), while male respondents accounted for 33.8%. Most participants were aged between 20 and 40 years (65.6%), indicating that the sample largely consisted of individuals in their productive working age. In terms of professional background, respondents were evenly distributed across ten health professions, including medical doctors, dentists, nurses, midwives, pharmacists, nutritionists, and other public health professionals, each representing 10% of the total sample. This balanced distribution ensured adequate representation of diverse health professions in the analysis.

Table 1. Socio-demographic characteristics of health workers (n = 320)

Characteristics and Category	n	%
Gender		
Male	108	33.8
Female	212	66.3
Age		
20–40 years	210	65.6
41–60 years	110	34.4
Health profession		
Medical doctor	32	10.0
Dentist	32	10.0
Nurse	32	10.0
Midwife	32	10.0
Health promotion officer	32	10.0
Epidemiologist	32	10.0
Environmental health officer	32	10.0
Medical laboratory technologist	32	10.0
Pharmacist	32	10.0
Nutritionist	32	10.0

Measurement model evaluation

The measurement model was evaluated by examining convergent validity, internal consistency reliability, and discriminant validity. As shown in Table 2, all constructs demonstrated satisfactory convergent validity, with Average Variance Extracted (AVE) values ranging from 0.591 to 0.804, exceeding the recommended threshold of 0.50. Internal consistency reliability was also confirmed, as composite reliability values ranged from 0.876 to 0.970. Cronbach's alpha coefficients for all constructs exceeded the acceptable cutoff value of 0.70.

Discriminant validity was assessed using the Fornell–Larcker criterion. As reported in Table 3, the square root of the AVE for each construct was greater than its correlations with all other constructs. This finding indicates that each latent construct is empirically distinct and that discriminant validity was adequately established.

Table 2. Construct reliability and convergent validity

Constructs	AVE	Composite reliability	Cronbach's alpha
Organizational commitment	0.639	0.876	0.811
Healthy work environment	0.591	0.878	0.827
Motivational climate	0.801	0.889	0.752
Career development	0.718	0.910	0.868
Quality of work life	0.804	0.970	0.965
Job performance	0.720	0.911	0.867

Table 3. Discriminant validity assessment using the Fornell–Larcker criterion

Construct	MC	JP	OC	QWL	HWE	CD
Motivational climate (MC)	0.895					
Job performance (JP)	0.718	0.849				
Organizational commitment (OC)	0.253	0.295	0.799			
Quality of work life (QWL)	0.856	0.767	0.295	0.897		
Healthy work environment (HWE)	0.183	0.392	0.252	0.216	0.769	
Career development (CD)	0.778	0.786	0.302	0.824	0.225	0.847

Note: Diagonal values represent the square root of AVE

Structural model evaluation

The structural model was evaluated by examining path coefficients (β), t -values, p -values, and effect sizes (f^2). The results of the direct effects are summarized in Table 4. The findings indicate that motivational climate exerted a strong and statistically significant positive effect on QWL ($\beta = 0.542$, $t = 13.240$, $p < 0.001$), followed by career development ($\beta = 0.387$, $t = 8.736$, $p < 0.001$). In contrast, organizational commitment and a healthy work environment did not demonstrate statistically significant direct effects on QWL. With respect to job performance, career development ($\beta = 0.423$, $t = 6.569$, $p < 0.001$) and a healthy work environment ($\beta = 0.216$, $t = 6.279$, $p < 0.001$) were found to have significant positive effects. In addition, QWL exerted a significant positive influence on job performance ($\beta = 0.272$, $t = 3.414$,

$p = 0.001$), supporting its role as an important determinant of health workers' performance. Conversely, organizational commitment and motivational climate did not show significant direct effects on job performance. Effect size analysis revealed that motivational climate had a large effect on QWL ($f^2 = 0.280$), whereas the other significant relationships demonstrated small to moderate effect sizes.

Although several relationships show relatively small effect sizes, such results are common in complex organizational models examined in real-world institutional contexts. In decentralized health systems, variations in governance structures, managerial capacity, and resource allocation may attenuate the magnitude of certain relationships while still allowing them to contribute meaningfully to the overall explanatory model.

Table 4. Structural model results (direct effects)

Path	β	<i>t</i> -value	<i>p</i> -value	<i>f</i> ²	Result
OC → QWL	0.035	1.227	0.220	0.002	Not supported
HWE → QWL	0.021	0.895	0.371	0.002	Not supported
MC → QWL	0.542	13.240	<0.001	0.280	Supported
CD → QWL	0.387	8.736	<0.001	0.005	Supported
OC → JP	0.004	0.133	0.894	0.011	Not supported
HWE → JP	0.216	6.279	<0.001	0.146	Supported
MC → JP	0.115	1.878	0.060	0.182	Not supported
CD → JP	0.423	6.569	<0.001	0.000	Supported
QWL → JP	0.272	3.414	<0.001	0.051	Supported

Mediation analysis

Mediation effects were examined using a bootstrapping procedure with 5,000 resamples. The results of the specific indirect effects are presented in Table 5. The analysis showed that QWL significantly mediated the relationship between motivational climate and job performance ($\beta = 0.147$, $t = 3.467$, $p = 0.001$), as well as between career development and job performance ($\beta = 0.105$, $t = 2.974$, $p = 0.003$). In contrast, QWL did not me-

diates the effects of organizational commitment or a healthy work environment on job performance, as the indirect effects were not statistically significant. These findings indicate that the mediating role of QWL is selective and context-dependent, functioning primarily as a mechanism through which motivational climate and career development enhance the job performance of health workers.

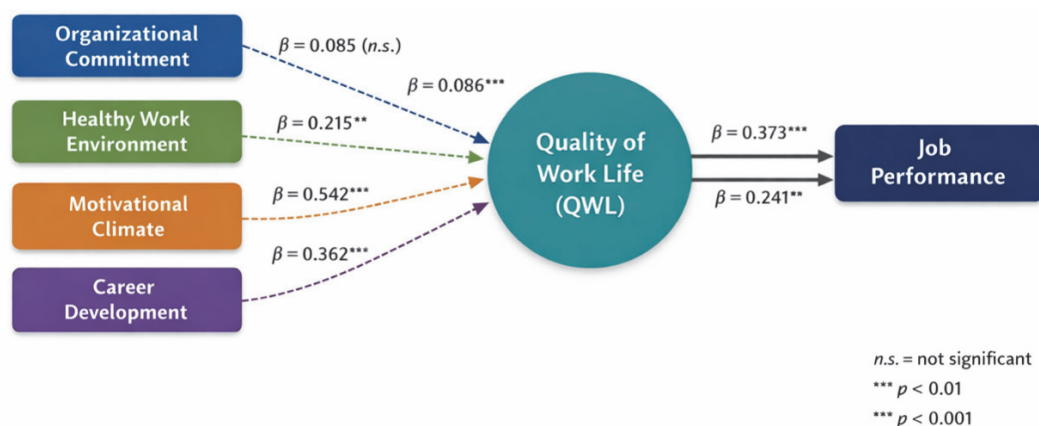
Table 5. Mediation analysis results (specific indirect effects)

Hypothesis	β	<i>t</i> -value	<i>p</i> -value	Result
OC → QWL → JP	0.010	1.106	0.269	Not supported
HWE → QWL → JP	0.006	0.860	0.390	Not supported
MC → QWL → JP	0.147	3.467	<0.001	Supported
CD → QWL → JP	0.105	2.974	0.003	Supported

Structural model illustration

Fig. 1 illustrates the results of the PLS-SEM analysis and provides a visual representation of the structural relationships among organizational commitment, healthy work environment, motivational climate, career development, QWL, and job performance. The figure presents standardized path coefficients, indicating both the strength and direction of the relationships among constructs. Consistent with the statistical results, motivational climate and career development exhibit strong positive effects on QWL, whereas organizational com-

mitment and a healthy work environment show weak and non-significant relationships with QWL. Regarding job performance, career development, healthy work environment, and QWL demonstrate significant positive effects, while organizational commitment and motivational climate do not directly influence performance. The indirect paths depicted in the figure further confirm the mediating role of QWL in the relationships between motivational climate, career development, and job performance.

**Fig. 1.** Structural model of the PLS-SEM analysis

Discussion

The findings of this study provide important insights into how organizational factors influence the job performance of health workers within decentralized health systems. The results confirm that Quality of Work Life (QWL) exerts a significant positive effect on job performance. However, its mediating role is not universal but selective, operating only under certain organizational conditions.

The results indicate that organizational commitment does not significantly influence either QWL or job performance. This finding contrasts with studies conducted in more stable organizational contexts, where organizational commitment is typically associated with stronger psychological attachment, higher motivation, and improved performance (Avolio et al., 2004; Mosadeghrad et al., 2008). In such environments, committed employees tend to demonstrate higher levels of psychological well-being and discretionary effort, contributing to organizational effectiveness (Zulkarnain et al., 2024b). However, the present findings are consistent with research conducted in public-sector and decentralized health systems, where the influence of organizational commitment is often weaker (Tsofa et al., 2017; Wei et al., 2020). Fragmented authority structures, multiple accountability mechanisms, and limited central control may reduce employees' identification with the organization, thereby weakening the behavioral consequences of commitment.

The study also finds that a healthy work environment does not significantly influence QWL, although it has a direct and significant effect on job performance. Previous research has generally shown that supportive and safe work environments improve QWL (Aiken et al., 2002; Lu et al., 2019). However, the present findings suggest that in decentralized health systems, the work environment may function primarily as an operational resource that facilitates task execution rather than as a determinant of perceived work-related well-being. This interpretation aligns with findings by Wei et al. (2019), indicating that structural conditions in public-sector organizations often exert direct effects on performance rather than indirect effects through psychological mechanisms.

In contrast, motivational climate and career development demonstrate significant positive effects on QWL. These results are consistent with prior studies highlighting the importance of intrinsic motivation, recognition, and professional development opportunities in shaping employees' work experiences (Lu et al., 2019). When employees perceive fairness, encouragement, and clear career prospects, their evaluation of their work life improves. This relationship appears particularly relevant in decentralized systems, where career advancement opportunities may vary across regions. Similar findings were reported by Zulkarnain et al. (2026), who demonstrated that personal resources enhance well-being among contract health-care workers and mitigate the negative effects of job demands. Drawing on the Job Demands-Resources (JD-R) and Conservation of Resources (COR) frameworks, the study emphasizes the importance of psychological resources such as resilience, self-efficacy, and coping capacity in sustaining employee well-being under demanding conditions.

In addition, Zulkarnain et al. (2023a) further support the JD-R perspective, demonstrating that job demands, job resources, and personal resources jointly shape employees' motivational states and work engagement. Their findings suggest that both organizational and individual factors play a critical role in sustaining well-being and performance. This evidence

reinforces the argument that improvements in motivational climate and career development can enhance employees' work experiences and contribute to better performance outcomes.

The mediation analysis provides further clarification of the underlying mechanisms. QWL mediates the relationships between motivational climate and job performance and between career development and job performance, indicating that these factors influence performance through improvements in employees' work-related well-being. However, QWL does not mediate the effects of organizational commitment or healthy work environment. These findings challenge the assumption that QWL universally mediates the relationship between organizational determinants and performance (Brooks and Anderson, 2005; Kanten and Sadullah, 2012). Instead, they suggest that QWL functions more effectively as an intermediary mechanism when organizational factors directly address intrinsic motivation and opportunities for self-development (Lu et al., 2019).

From a theoretical perspective, this study contributes to the literature by positioning QWL as a conditional rather than universal mediator. In decentralized health systems, structural and administrative factors may influence job performance directly, whereas motivational and developmental factors operate through employees' perceived quality of work life. This interpretation is consistent with research suggesting that QWL in public-sector organizations is shaped by broader institutional conditions such as governance structures, labor regulations, and career systems (Van der Heijden et al., 2019).

Policy implications

The findings suggest that improving health worker performance in decentralized systems requires more than structural improvements. Policymakers should prioritize strengthening motivational climate and career development while maintaining supportive work environments to enhance both QWL and performance.

Study limitations

This study has several limitations. First, the cross-sectional research design limits the ability to infer causal relationships among the examined variables. Second, the use of self-reported data may introduce response bias. Third, the study focuses on health workers in a decentralized health system in Indonesia, which may limit the generalizability of the findings to other institutional contexts. Future research may benefit from longitudinal approaches and comparative studies across different health systems.

These findings suggest that health workforce policies in decentralized systems should prioritize professional development programs, structured career pathways, and supportive motivational climates to sustain workforce performance.

Conclusion

This study shows that QWL positively affects job performance but does not universally mediate all organizational factors. QWL mediates the effects of motivational climate and career development, but not organizational commitment or healthy work environment. These results position QWL as a conditional mediator. Practically, strengthening motivation and career development is key to improving performance.

Conflict of interest

The authors have no potential conflict of interest to declare with respect to the research, authorship, and/or publication of this article.

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