The Role of Perceived Work Environment on Job Performance: Evidence from Traditional Chinese Medicine Hospital in Northeast China

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Abstract

This research investigated the effects of perceived work environments on healthcare workers' performance in a Traditional Chinese Medicine (TCM) hospital in Northeast China. We used a questionnaire survey design, collecting 339 valid responses from medical staff via an online questionnaire. Statistical analyses, including Pearson correlation and multiple regression, revealed that both dimensions of the work environment positively affect job performance, with non-physical factors showing a slightly greater influence. These findings confirm that adequate resources and a supportive environment contribute significantly to enhanced job performance. The study provides theoretical validation of the JD-R framework and practical recommendations for TCM hospital administrators aiming to enhance human resource effectiveness and healthcare quality.

Keywords: work environment; job performance; TCM Hospital; job demands-resources

1. Introduction

Currently, China is committed to improving the efficiency and service quality of healthcare organizations and has been pushing forward with deepening reforms in the healthcare sector. In this general situation, how to improve the performance of healthcare professionals has become a key concern for hospital administrators (Fan et al., 2018). Among the many determinants of job performance, the work environment—comprising both physical and non-physical dimensions—has been consistently identified as a key influencing factor.

In Traditional Chinese Medicine (TCM) hospitals, this issue is especially significant. These institutions face the dual challenge of integrating traditional healing philosophies with modern clinical standards, often within environments that are resource-constrained and culturally complex (Zhou et al., 2016). The physical work environment includes tangible factors such as infrastructure, medical equipment, spatial layout, and safety conditions. In contrast, the non-physical environment encompasses intangible elements like leadership style, teamwork, communication systems, and organizational culture (Liu et al., 2023). A well-perceived work environment—both physically and psychologically—has been shown to enhance employee motivation, reduce burnout, and boost performance outcomes. Accordingly, to examine the motivation of Traditional Chinese Medicine (TCM) healthcare professionals, it is imperative to recognize the cultural specificities and contextual factors that influence their work motivation. Previous research on work motivation often adopts Western-centric theories, such as Maslow's hierarchy of needs, Herzberg's two-factor theory, or self-determination theory, which may fail to capture nuances inherent to Chinese workers deeply embedded in Confucian values and collectivist ideologies. While such frameworks provide a general understanding, the cultural lens is crucial to contextualize motivation among Chinese TCM professionals, who operate in a healthcare system uniquely influenced by traditional practices and philosophies.

Despite the growing attention to job performance in general hospital settings, there remains a gap in understanding how subjective perceptions of the work environment affect performance in TCM hospitals. This study addresses that gap by focusing on a TCM hospital in Northeast China, employing the Job Demands-Resources (JD-R) framework to examine how both physical and non-physical workplace factors influence healthcare workers' task and contextual performance.

The study took place at a Grade 3A Traditional Chinese Medicine (TCM) hospital in Jilin Province, Northeast China. The hospital was set up in 1958 and is the largest TCM hospital in Jilin Province, with 2,003 beds, 29 clinical departments, and 8 medical technology departments. The hospital provides comprehensive services such as medical treatment, research, education, prevention, rehabilitation, and health management. World-famous for its clinical ability, the hospital excels at the treatment of chronic diseases like stroke, coronary heart disease, and diabetes and has shown particular strengths in the treatment of brain, cardiovascular, and metabolic diseases. Its academic and clinical reputation is indicated in the

fact that it has led many national scientific research programs and has been awarded many prizes for scientific and technological progress. To examine in detail the impact of work motivation and environmental factors on job performance, the study was conducted among a heterogeneous sample of medical personnel—ranging from doctors to nurses to paramedical personnel—constituting all clinical and technical departments of the hospital.

The purpose of this study was to assess the relationship between the work environment and job performance of healthcare workers in Hospital A. The study was conducted to determine the relationship between the work environment and job performance. By identifying specific environmental factors that contribute to performance improvement, actionable recommendations were provided to hospital administrators. Moreover, this study provides empirical evidence that can support broader strategic improvements in human resource development and organizational competitiveness across other TCM healthcare institutions (Bai et al., 2022; Wang et al., 2024).

2. Literature Review

This section reviews relevant literature on the impact of perceived work environments on healthcare workers' performance, focusing on the dual dimensions of physical and non-physical environments. Grounded in the Job Demands-Resources (JD-R) theory, this review builds a conceptual understanding of how workplace resources function to enhance or hinder performance, particularly in the context of Traditional Chinese Medicine (TCM) hospitals.

2.1 Job Demands–Resources (JD-R) Model

In the Job Demands–Resources (JD-R) model, every profession possesses specific stress-related risk factors which can be categorized into job demands and job resources (Ryan & Deci, 2020). Job demands are physical, psychological, social, or organizational job components that involve tremendous physical or mental effort and therefore involve certain physiological and psychological costs. Conversely, job resources are aspects of the work environment that reverse those demands, support goal achievement, and enhance personal growth and well-being. Of these resources, the work environment is paramount, encompassing physical aspects—such as facilities, equipment, and accommodation arrangements—and non-physical aspects, including organizational climate and interpersonal relationships. These aspects collectively form the employees' experience and expertise, in turn directly enhancing the effectiveness of services in healthcare. Also, the work environment acts as a significant moderating variable that may trigger or prevent individual performance results, thus impacting total organizational productivity and success (Alshmemri et al., 2017).

2.2 Environment in the Healthcare

The physical environment in the healthcare facility context refers to physical aspects, e.g., facilities, equipment arrangement, ergonomic setup, and safety gear (Li & Mahyuddin, 2023). Planned space organization, sophisticated medical tools, and systematic application of

standard sanitary procedures in hospitals have been well established to significantly increase the efficiency of hospital staff, lessen physical fatigue, and guarantee the accuracy and truthfulness of clinical treatment (Deng et al., 2019). On the other hand, physical impairments such as poor ventilation, inefficient workflow channels, or a lack of medical equipment have the potential to create operational inefficiencies, staff exhaustion, and increased medical error risks, ultimately harming the overall quality of care and patient safety (Wu et al., 2020). Physical factors are thus integral variables affecting the performance and effectiveness of healthcare delivery systems (Tao et al., 2024).

Unlike physical environments, non-physical environments have intangible but equally significant determinants such as organizational culture, leadership commitment, teamwork, communication systems, and psychological safety (Sun et al., 2017). A positive non-physical environment fosters a workplace culture marked by trust, respect, and well-defined responsibilities and thus stimulates higher degrees of employee commitment and environmental performance. This kind of supportive culture promotes behaviors including proactivity, resilience, and knowledge sharing, which enhance organizational and individual efficacy (Chen et al., 2024). Empirical evidence suggests that when employees feel they are receiving strong organizational support in the form of fair treatment and openness, they will exhibit higher levels of engagement and organizational commitment (Zeng et al., 2025).

The perceived quality of these environmental elements plays a vital role in determining whether healthcare professionals experience their jobs as energizing or exhausting (Hegazy et al., 2022). When healthcare workers perceive their work environment as rich in resources, they are more likely to experience work engagement, lower burnout, and better performance (Kotze, 2018). In contrast, environments perceived as unsupportive or resource-scarce often correlate with emotional exhaustion, reduced performance, and higher turnover intentions (Wan et al., 2018).

While existing research has extensively investigated work demands and stressors in general hospitals, there remains a notable gap in studies that examine the work environment as an independent predictor of employee performance—an oversight particularly evident in the context of traditional Chinese medicine (TCM) hospitals (Wan et al., 2018). These institutions operate within a unique framework, requiring the integration of traditional medical philosophies with contemporary clinical practices, which presents distinct challenges in physical space design, interdisciplinary collaboration, and team dynamics (Kotze, 2018). The mechanisms through which environmental factors influence performance in such culturally embedded settings remain underexplored. This study addresses this gap by investigating how healthcare workers' subjective perceptions of both the physical and non-physical work environment affect their job performance, thereby contributing to theoretical advancement and practical improvements in workforce strategy (Bai & Mohammed, 2024). Grounded in the Job Demands–Resources (JD-R) model, the research conceptualizes the work environment not

as a peripheral condition but as a central determinant of healthcare delivery efficiency (Pirrotta et al., 2025). By systematically analyzing the interaction between the distinctive features of traditional medicine and the operational demands of modern healthcare systems, the study offers an innovative dual-perspective framework (Chua et al., 2024). The findings provide actionable insights for healthcare administrators, enabling the evidence-based allocation of environmental resources and the creation of supportive ecosystems that foster professional growth and long-term improvements in service quality (Pirrotta et al., 2025). Such an integrated approach enhances the study's relevance and applicability to human resource management in complex and culturally nuanced healthcare environments (Kaiser et al., 2020).

Based on the literature review and grounded in the Job Demands-Resources (JD-R) theoretical framework, the following research hypotheses were formulated. Prior studies have consistently shown that both physical and non-physical work environments contribute to job performance. For instance, Li & Mahyuddin (2023) emphasized that high-quality infrastructure and equipment improve staff efficiency in Chinese hospitals.

Therefore: *Hypothesis 1: The physical work environment has a significant positive effect on healthcare job performance.*

Furthermore, Chen et al. (2024) and Wu et al. (2020) found that supportive leadership and positive organizational culture were associated with greater employee engagement and reduced burnout, leading to higher performance. Thus:

Hypothesis 2: The non-physical work environment has a significant positive effect on healthcare job performance.

Finally, integrating both dimensions offers a more holistic view. According to Kotze (2018) and Pirrotta et al. (2025), a resource-rich environment overall—both tangible and intangible—enhances task efficiency and contextual adaptability. Hence:

Hypothesis 3: The overall perceived work environment (including both physical and non-physical dimensions) positively influences healthcare job performance.

2.3 Conceptual Framework

This section integrates the Job Demands-Resources (JD-R) theory to comprehensively understand how the perceived work environment influences healthcare workers' performance. By examining both the physical and non-physical dimensions of the work environment as critical job resources, the chapter highlights how supportive conditions can reduce job strain, enhance engagement, and improve performance outcomes. These insights form the theoretical foundation guiding this research, emphasizing the importance of building resource-rich environments to sustain high-quality service delivery in healthcare institutions, particularly within the context of Traditional Chinese Medicine hospitals.

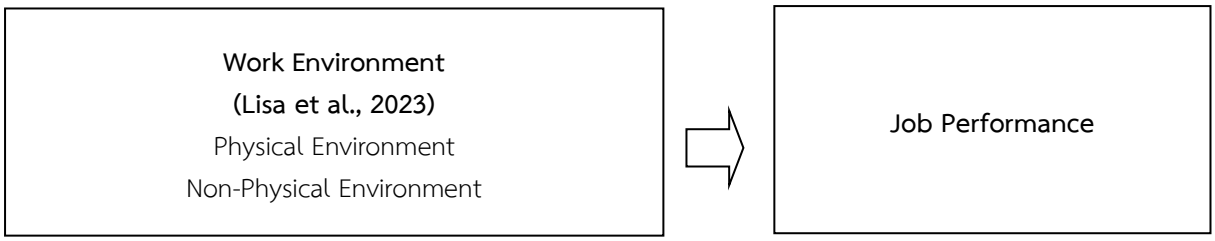

Figure 1 Conceptual Framework

Figure 1 provides a conceptual framework of the study, which indicates that the work environment, encompassing both physical and non-physical elements, is proposed to influence job performance (Lisa et al., 2023).

3. Research Methodology

This study employed a cross-sectional quantitative design to examine the impact of the work environment on the performance**.**

3.1 Population and Sample

This study employed 735 doctors at Hospital A, a prominent Traditional Chinese Medicine (TCM) hospital in Northeast China. Based on Taro Yamane's formula for sample size calculation at a ±5% margin of error, a minimum of 286 respondents was required. Anticipating an 80% response rate, thus 358 doctors at the Hospital were approached.

3.2 Sampling

The participants were selected using a stratified random sampling method to ensure representative coverage across relevant subgroups within the hospital workforce. This research ultimately achieved a notably high rate of 94.83%, yielding 339 valid responses.

3.3 Research Instrument

A six-point Likert scale was used to rate the participants' levels of agreement, ranging from Strongly Agree to Strongly Disagree. The questionnaire used in this research consisted of three main sections: demographic information, work environment, and job performance. To ensure the scientific rigor of the study. A structured questionnaire was developed based on the Job Demands-Resources (JD-R) theory. The questionnaire consisted of three sections: demographic information, work environment, and job performance.

3.4 Quality of Research Instrument

In order to confirm quality of research instrument, this research employed three academic experts assessed the content validity of the questionnaire using the item-objective congruence (IOC) method. According to the experts' assessment, the average IOC score was 0.90, indicating a high level of item-relevance agreement.

A pilot study was conducted with 30 healthcare workers to assess the clarity, structure, and internal consistency of the questionnaire. Based on participant feedback, the questionnaire was modified to improve its quality before full deployment. The Cronbach's

alpha coefficients for the work environment and job performance scales were 0.86 exceeding the threshold of 0.70 for high reliability.

The reliability of each construct was assessed using Cronbach's alpha, which showed a reliability of 0.91 for the Work Environment Scale and 0.88 for the Job Performance Scale, both of which exceeded the accepted threshold of 0.70 for high internal consistency.

3.5 Data Collection

Data collection took place over a two-week period during February 2025, with the online questionnaire distributed via WeChat. A total of 339 valid responses were received. The sample size was determined according to Cochrane's sample size formula to ensure sufficient power for regression analysis.

3.6 Data Analysis

The collected data were summarized in the scoring scheme and how average responses were interpreted as follows.

Table 1 Data scoring and interpretation.

Attitude	Score	Average Score	Level of perception
Strongly Agree	6 points	5.18–6.00	Strongly Agree
Agree	5 points	4.34–5.17	Agree
Slightly Agree	4 points	3.51–4.33	Slightly Agree
Slightly Disagree	3 points	2.68–3.50	Slightly Disagree
Disagree	2 points	1.84–2.67	Disagree
Strongly Disagree	1 point	1.00–1.83	Strongly Disagree

The data were analyzed using SPSS to test the research hypotheses using descriptive statistics, Pearson's correlation, and multiple linear regression. The study focused on the physical and non-physical components of the work environment and their respective effects on job performance.

4. Research Finding

Based on the basic information, such as gender, age, highest level of education, and total working experience, this survey's information is analyzed as follows:

Table 2 Demographic Information

Variable	Category	Frequency (N)	Percentage (%)
Gender	Male	165	48.67
	Female	174	51.33

Variable	Category	Frequency (N)	Percentage (%)
Highest level of education	Bachelor's Degree	2	0.59
	Master's Degree	88	25.96
	Doctoral Degree	249	73.45
Work Experience	0-10 years	187	55.16
	11- 20 years	87	25.66
	More than 20 years	65	19.17
Total	**-**	**339**	**100**

Table 2 presents the demographic information of the 339 healthcare workers who participated in the survey. Regarding gender, the distribution is relatively balanced, with 165 male respondents (48.67%) and 174 female respondents (51.33%). In terms of education level, the majority of participants hold postgraduate degrees. Specifically, 249 respondents (73.45%) have obtained a doctoral degree, followed by 88 respondents (25.96%) with a master's degree. Only 2 participants (0.59%) reported holding a bachelor's degree, and none of the respondents hold a diploma. As for work experience, more than half of the participants—187 respondents (55.16%)—have between 0 and 10 years of professional experience. Additionally, 87 respondents (25.66%) have worked for 11 to 20 years, while 65 respondents (19.17%) have over 20 years of work experience. The demographic characteristics reflect a highly educated and professionally diverse sample, providing a reliable foundation for analyzing the impact of the work environment and performance in the hospital context.

Table 3 Descriptive Statistics

Variable	Mean	Standard Deviation	Level of perception
Physical Environment	2.89	1.10	Slightly disagree
Non-Physical Environment	2.98	1.44	Slightly disagree
Work Environment	2.90	1.20	Slightly disagree
Job performance	2.90	1.41	Slightly disagree

Table 3 presents the descriptive statistics for the four main variables measured in this study: physical environment, non-physical environment, overall work environment, and job performance. Each was assessed using a six-point Likert scale, where lower scores indicate higher agreement. The physical environment received a mean score of 2.89 (SD = 1.10), reflecting a general tendency toward "Slightly disagree," suggesting participants viewed infrastructure, equipment, and spatial layout as moderately supportive. The non-physical environment yielded a mean of 2.98 (SD = 1.44), indicating slightly more varied perceptions, but still within the "Slightly disagree" range. Combining both dimensions, the overall work environment averaged 2.90 (SD = 1.20), maintaining consistency in perception. Job performance showed a similar mean of 2.90 (SD = 1.41), suggesting respondents generally

assessed their performance positively, albeit modestly. Collectively, these values demonstrate that respondents perceived both their work environment and performance in a moderately favorable light, without indicating either strong satisfaction or strong dissatisfaction. The standard deviations for non-physical environment (SD = 1.44) and job performance (SD = 1.41) were relatively higher, suggesting greater variability in respondents' perceptions. Such variation may reflect differences in departmental cultures, leadership styles, or personal job expectations within the hospital setting.

Table 4 Relationship between work environment and Job performance

Variable	Physical Environment	Non-physical Environment	Work Environment	Job performance
Physical Environment	1			
Non-physical Environment	0.421**	1		
Work Environment	0.839**	0.847**	1	
Job performance	0.451**	0.479**	0.552**	1

** Correlation is significant at 0.01 level.

Table 4 presents the results of the Pearson correlation analysis conducted to examine the relationships between the components of the work environment and job performance among healthcare workers. The correlation between the physical environment and the non-physical environment is positive and statistically significant ($r = 0.421$, $p < 0.01$), indicating that improvements in one aspect of the work environment are associated with improvements in the other. The result suggests that hospitals with good physical infrastructure tend to also foster supportive organizational cultures and interpersonal environments. A moderate positive correlation was also found between the physical environment and job performance ($r = 0.451$, $p < 0.01$). This result implies that a well-structured and adequately equipped physical work environment is associated with higher levels of job performance. Similarly, the non-physical environment shows a statistically significant correlation with job performance ($r = 0.479$, $p < 0.01$), suggesting that factors such as leadership support, teamwork, and communication have a meaningful influence on how well employees perform their duties. Additionally, the overall work environment variable demonstrates a strong and statistically significant correlation with job performance ($r = 0.552$, $p < 0.01$), further reinforcing the integrated influence of both physical and non-physical aspects on employee outcomes. All correlations are significant at the 0.01 level, indicating robust relationships between work environment factors and job performance.

Table 5 Multiple linear regression analysis of physical and non-physical environment on job performance.

Variables	β	b	SE	t	Sig.	VIF	Tolerance
Constant	-	0.995	0.17	5.866	<0.000***		
Physical Environment	0.303	0.305	0.05	6.052	<0.000***	1.215	0.823
Non-physical Environment	0.352	0.345	0.049	7.018	<0.000***	1.215	0.823
R^2 = 0.306, Adjusted R^2 = 0.301, F(2, 336) = 73.92, p = 0.000***, D-W = 1.786							

*** denotes significance at 0.01

Table 5 presents the results of the multiple linear regression analysis conducted to examine the influence of the physical and non-physical work environment on healthcare workers' performance. The model shows a satisfactory overall fit, with an R-squared of 0.306 and an adjusted R^2 of 0.301, indicating that approximately 30.1% of the variance in job performance can be explained by the two dimensions of the work environment. The F-statistic of 73.92 with a p-value of 0.000 confirms that the overall regression model is statistically significant. Additionally, the Durbin-Watson statistic of 1.786 suggests that there is no significant autocorrelation in the residuals.

In terms of individual predictors, both dimensions of the work environment show statistically significant positive effects on job performance. The physical environment demonstrates a standardized beta coefficient of 0.303 with a t-value of 6.052 (p = 0.000), indicating a strong contribution to performance outcomes. Relatedly, the non-physical environment exhibits an even greater influence, with a standardized beta of 0.352 and a t-value of 7.018 (p = 0.000), further confirming its significant and positive association with job performance. These results suggest that improvements in both the physical and non-physical aspects of the work environment contribute significantly to enhancing job performance in Traditional Chinese Medicine hospitals.

Table 6 Multiple linear regression analysis of work environment on job performance.

Variables	β	b	SE	t	Sig.
Constant	-	0.994	0.169	5.870	<0.000***
Work Environment	0.552	0.650	0.053	12.163	<0.000***
R^2 = 0.305, Adjusted R^2 = 0.303, F (1, 337) = 147.92, p = 0.000***, D-W = 1.782					

*** denotes significance at 1% level.

Table 6 presents the results of the multiple linear regression analysis, demonstrating that the work environment has a significant positive impact on job performance. The standardized regression coefficient (β = 0.552, p < 0.001) indicates a moderately strong effect, suggesting that better perceptions of the work environment are associated with higher levels

of job performance. The unstandardized coefficient (b = 0.650) implies that for every one-unit increase in the perceived quality of the work environment, job performance improves by 0.650 units. The model explains approximately 30.5% of the variance in job performance (R^2 = 0.305; Adjusted R^2 = 0.303), which is statistically significant as indicated by the F-value (F (1, 337) = 147.92, $p < 0.001$). The Durbin-Watson statistic (D-W = 1.782) suggest no serious autocorrelation among residuals.

5. Discussion

The findings of this study are consistent with those of Liu et al. (2023), who identified resource availability and management strategies as key determinants of operational efficiency in TCM hospitals. Their use of the Bootstrap-Malmquist-DEA model demonstrated that technological progress was key to preserving service quality, particularly during external disruptions such as the COVID-19 pandemic (Liu et al., 2023). However, the present study emphasizes perceived work environment quality over objective efficiency metrics, highlighting that non-physical factors such as leadership support and organizational culture had a slightly stronger impact on job performance than physical infrastructure, as indicated by the higher standardized beta coefficient (β = 0.352 vs. β = 0.303).

This finding is consistent with Chen et al. (2024), who highlighted the role of psychological safety and organizational support in reducing turnover among healthcare workers. Besides, Wu et al. (2020) found that strong leadership and efficient communication increased job satisfaction and reduced burnout, which emphasized the importance of non-physical resources in reducing job stress. In contrast, Bai et al. (2022) reported that physical infrastructure improvements had a greater impact in rural TCM hospitals, suggesting that resource availability and work culture may moderate the effect of work environment factors, as also noted by Sun et al. (2017).

Although Liu et al. (2023) emphasized the importance of technological advances in improving operational efficiency, this study suggests that a supportive organizational culture and effective communication systems may have a more substantial impact on job performance, especially in an urban TCM setting. This finding is consistent with Kotze (2018), who argued that perceived organizational support is an important resource for buffering the impact of job demands. Thus, strengthening physical infrastructure and non-physical resources appears to be a comprehensive strategy for optimizing job performance in TCM hospitals.

6. Conclusion

The purpose of this research was to examine how healthcare workers' perceptions of the physical and non-physical work environments affect their job performance in a Traditional Chinese Medicine (TCM) hospital in Northeast China. Using a cross-sectional quantitative approach with 339 valid responses, the study employed descriptive statistics, correlation

analysis, and multiple regression to test the proposed hypotheses. The findings confirm that both the physical environment (e.g., infrastructure, equipment) and the non-physical environment (e.g., leadership, teamwork, organizational culture) have a significant positive effect on job performance. These results are consistent with the initial hypotheses and empirically support the core argument that "a well-resourced and supportive work environment is critical for improving task and contextual performance among healthcare workers."

This research builds upon and extends the application of the Job Demands-Resources (JD-R) model within the healthcare setting. It points out the importance of job resources in enhancing engagement and mitigating burnout among medical professionals. In particular, the research highlights how perceived work environment—functioning as a job resource—affects healthcare delivery outcomes. The findings confirm that the work environment is a key driver of healthcare quality and organizational effectiveness, not just a foundational condition. This finding redefines the strategic value of the work environment in healthcare management and suggests it is a proactive quality improvement strategy.

Additionally, the study's dual focus on both physical and non-physical dimensions of the work environment provides a more comprehensive understanding of the mechanisms influencing job performance. This research provides hospital administrators, especially Chinese medicine institutions facing the challenges of integrating traditional and modern medicine, with concrete implementation paths for building work environments that promote professional development and organizational excellence, not only by improving structural conditions such as physical space and equipment but also by fostering soft environmental elements such as supportive organizational culture and team relationships.

Table 7 Summarize of hypothesis testing

	Hypothesis	Result
H_1	*The physical work environment has a significant positive effect on healthcare job performance.*	Supported
H_2	*The non-physical work environment has a significant positive effect on healthcare job performance.*	Supported
H_3	*The overall perceived work environment (including both physical and non-physical dimensions) positively influences healthcare job performance.*	Supported

As indicated from the regression analysis, Hypotheses 1, 2, and 3 were confirmed, establishing that physical and non-physical working environments considerably add value to positive impacts on healthcare workers' job performance. Precisely, the non-physical environment was more influential, highlighting the imperative need for organizational support, communication, and interpersonal relationships in the improvement of employees'

performance outcomes. These results imply that whereas material infrastructure remains more prominent, softer qualities like leadership, collaboration, and psychological safety might even be at the center of determining performance in healthcare environments.

The findings of this study stress the significant influence of both physical and non-physical work environment elements on the job performance of healthcare workers in Traditional Chinese Medicine (TCM) hospitals in Northeast China. Utilizing the Job Demands-Resources (JD-R) framework, the research demonstrates that both tangible resources such as infrastructure and equipment, as well as intangible resources like organizational culture and leadership support, have a major effect on job performance. The results reveal that while both dimensions positively impact performance, non-physical factors exhibit a slightly stronger effect. The evidence suggests that fostering a supportive organizational culture and effective communication systems can be more impactful in enhancing overall job performance than merely improving physical work conditions. Consequently, the study provides a dual-focused framework for hospital administrators aiming to optimize work environments for improved healthcare delivery.

This research is constrained in a number of ways. Firstly, data were gathered from one Traditional Chinese Medicine hospital within Northeast China, which can limit the generalizability of the results to other institutional contexts or geographic regions. Secondly, the cross-sectional design of the study limits causality in making inferences for the work environment-job performance relationship. In order to enhance causal explanations and increase generalizability, follow-up studies should take into account using longitudinal or experimental study designs and measuring a more diverse sample at multiple centers.

7. Application of Findings to Enhance Organizational Competitiveness

The application of this study's findings to enhance organizational competitiveness in healthcare—particularly within Traditional Chinese Medicine (TCM) hospitals—lies in strategically prioritizing both physical and, more critically, non-physical work environment factors. By strengthening elements such as organizational support, effective communication, and a positive organizational climate, hospitals can foster higher employee satisfaction, reduce burnout, and improve overall job performance. Simultaneously, maintaining functional and well-designed physical infrastructure ensures operational efficiency. Combined, these enhancements elevate the quality of care delivered and position TCM hospitals to achieve a competitive advantage in an increasingly performance-driven healthcare market.

This study emphasizes the significance of implementing an integral approach to enhancing the performance of medical professionals on the basis of physical and non-physical environmental factors. Apart from regular maintenance and refurbishment of physical facilities and medical equipment to equip staff members with the corresponding physical resources, medical institutions must invest in enhancing the non-physical factors. These involve the

promotion of leadership styles, regard for employee input, and organizational culture based on psychological safety and open communication. In this regard, policies should be implemented to foster the well-being of employees and work-life balance, as well as professional growth. This approach is not only meant to stimulate staff motivation and performance but also to ensure long-term improvement in the quality of care and organizational performance.

At the organizational level, management must proactively apply the Job Demands–Resources (JD-R) model through ongoing measurement of job demands and provision of adequate resources to avoid employee burnout and maximize productivity. That entails determining where excess demands can derail performance and applying intervention measures in place to maximize job resources—such as support systems, training, and appreciation. In addition, organizations should apply regular checks so that the effects of these interventions are tracked long term in a bid to change strategies dynamically as conditions of work evolve and as needs of employees' shift. This strategy ensures a strong and performing health care workforce.

8. Research Suggestion

This study offers valuable insights into the effects of perceived work environments on healthcare workers' performance within a Traditional Chinese Medicine hospital located in Northeast China. This section provides Research contribution, Research Limitation, and Suggestion for future research as followed:

8.1 Research Contribution

This research contributes to the understanding that enhancing key organizational elements such as organizational support, effective communication, and fostering a positive organizational climate can significantly elevate employee satisfaction, mitigate burnout, and enhance overall job performance in hospital settings. Additionally, ensuring the maintenance of functional and well-designed physical infrastructure is critical for operational efficiency. The integration of these organizational and physical infrastructure improvements not only enhances the quality of care provided but also enables Traditional Chinese Medicine hospitals to attain a competitive advantage in an increasingly performance-oriented healthcare environment.

8.2 Research Limitation

Despite its contributions, this study has certain limitations that should be acknowledged. Firstly, the cross-sectional design inherently restricts the capacity to infer causality, emphasizing the need for longitudinal studies in future research. Secondly, the reliance on self-reported data introduces the potential for response bias, such as social desirability or recall inaccuracies, which could affect the validity of the findings. Moreover, broader samples are necessary to confirm the robustness of these findings. Lastly, the study

did not account for variables such as personal resilience, organizational policies, or leadership styles, which may confound the observed correlations.

8.3 Suggestion for Future Research.

Further research could involve comparative analyses between TCM and Western medicine hospitals to explore whether the associations between work environment factors and performance differ across medical paradigms. Firstly, deeper investigations into specific non-physical factors—such as leadership behavior, organizational support structures, and team dynamics—would yield targeted strategies for improvement. Secondly, long-term studies assessing the sustained effects of environmental enhancements on both healthcare workers and patient outcomes are also recommended. Lastly, exploring how cultural elements inherent in traditional Chinese practices influence perceptions of the work environment may provide culturally sensitive insights, integral for developing effective management models in similar contexts.

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