



## The Effects of Competency-Based Training, Shift Scheduling, and Resource Availability on Employee Job Performance: the Mediating Role of Work Engagement

Amal Prihatono<sup>1</sup>

<sup>1</sup>Institut Teknologi Sains dan Kesehatan (ITSK) RS dr. Soepraoen Malang, Indonesia

\*Corresponding Author: Amal Prihatono

Email: [amal@itsk-soepraoen.ac.id](mailto:amal@itsk-soepraoen.ac.id)



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### Abstract

*This study aims to analyze the effects of competency-based training, shift scheduling, and resource availability on employee job performance at the Traditional Health Center Sehat Harmoni Indonesia, with work engagement serving as a mediating variable. This study employed a quantitative research design with a cross-sectional approach. The population consisted of all employees of the Traditional Health Center Sehat Harmoni Indonesia. The sampling technique used was saturated sampling (census sampling), in which all members of the population were included as respondents. The total sample in this study was 50 employees. Data were collected through a structured questionnaire. The SEM-PLS analysis technique using SmartPLS 3 was applied to evaluate the direct and indirect effects within the proposed model. The findings reveal that competency-based training, shift scheduling, and resource availability significantly improve both work engagement and employee job performance, with resource availability showing the strongest direct effect. Work engagement also positively influences performance and serves as an effective mediator, indicating that these organizational practices enhance job outcomes both directly and indirectly by increasing employee engagement. Overall, well-designed training, effective scheduling, and adequate resources are essential for strengthening employee performance at Sehat Harmoni Indonesia. Future studies are recommended to include additional variables such as work motivation, leadership style, organizational culture, or job satisfaction to gain a broader understanding of factors influencing employee performance. Researchers may also employ longitudinal designs or expand samples across multiple traditional health centers to improve generalizability. Additionally, qualitative or mixed-method approaches could provide deeper insights into how training, shift scheduling, and resource availability shape employee experiences and performance.*

### Introduction

Employee performance has increasingly become a critical determinant of organizational success within the global healthcare sector, particularly as patient expectations continue to rise and service demands become more complex and multidimensional (Hassan et al., 2024; Cindy & Tanjung, 2024). The rapid growth of traditional health practices including acupuncture, herbal therapy, massage, and complementary medicine reflects a worldwide shift toward holistic and culturally grounded treatment modalities (Pranitasari et al., 2022; Skýpalová et al. 2022). This global expansion underscores the need for a highly competent, well-trained, and

fully engaged workforce capable of providing safe, ethical, and effective care. As healthcare organizations evolve, employee performance is shaped not only by individual competency but also by organizational practices such as structured competency-based training, equitable workload distribution, and adequate resource provision all of which contribute to shaping the quality and reliability of service delivery (Tyas et al., 2020; Chen et al., 2022). These organizational mechanisms have become increasingly important as healthcare institutions navigate higher patient volumes, technological transitions, and rising operational complexities.

In Indonesia, traditional health centers play an essential role in delivering community-based and culturally embedded health services, offering accessible alternatives to conventional medical treatment (Asamani et al., 2025; Johari et al., 2022). These centers rely on practitioners, administrative personnel, and support staff who must integrate technical expertise with patient-centered communication, empathy, and cultural sensitivity. Competency-based training ensures that practitioners acquire the necessary clinical skills, procedural accuracy, and ethical understanding required to maintain quality standards (Chang & Chen, 2020; Contreras et al., 2020). Meanwhile, shift scheduling serves as a central operational structure that influences employees' physical stamina, emotional well-being, and overall work-life balance. Resource availability including tools, treatment facilities, herbal supplies, documentation systems, and informational support is equally essential for enabling employees to perform their duties efficiently and safely within traditional healthcare environments (Beliaeva et al. 2020; Krijgsheld et al., 2022). Without adequate resources, even highly trained staff may struggle to deliver consistent and high-quality service.

Despite the importance of these factors, significant research gaps remain in the literature. Existing studies heavily focus on hospitals, clinical institutions, and corporate healthcare environments, leaving traditional health centers relatively understudied (Nobil et al., 2022; Lai et al., 2020). Moreover, prior research tends to examine competency-based training, shift scheduling, and resource availability as isolated variables rather than integrating them within a unified analytical framework (Downes & Lee, 2023; Tisu et al., 2020; Benayoune, 2024; Chen et al., 2022; Kogo, 2022; Ziakkas et al., 2022). As a result, empirical understanding of how these organizational components interact simultaneously to influence employee job performance in traditional healthcare settings remains limited. This gap is particularly important because traditional health centers have unique operational characteristics that differ from hospitals in terms of workflow, client expectations, regulatory oversight, and resource structures (Corbeanu & Iliescu, 2023; Fejfarová & Fejfar, 2022).

From a theoretical standpoint, the Job Demands-Resources (JD-R) Theory offers a comprehensive model for explaining how job resources and job demands influence employee motivation, well-being, engagement, and performance (Bakker & Demerouti, 2007; Lai et al., 2020; Koroglu & Ozmen, 2022; Demerouti & Bakker, 2023; Galanakis & Tsitouri, 2022). However, its application in traditional health service environments is still minimal, despite its potential to capture the complexities of their organizational dynamics. Similarly, the Work Engagement Model which conceptualizes engagement through the dimensions of vigor, dedication, and absorption remains underexplored in non-hospital traditional healthcare institutions (Tisu et al., 2020). Campbell's Job Performance Model (Nobil et al., 2022), which identifies performance as a function of skill, effort, and situational factors, has also not been fully integrated within traditional healthcare research. These theoretical gaps indicate the need for studies that incorporate multidimensional organizational predictors and psychological mediators within a unified conceptual model.

Empirical findings in previous research also reveal inconsistencies. Some studies report that competency-based training has a strong positive effect on job performance, while others suggest that its impact is context-dependent or relatively weak depending on implementation quality and organizational culture (Ryu et al., 2023; Nasrul & Masdupi, 2020). Research on

shift scheduling has generated mixed results: certain studies associate shift work with fatigue, burnout, and reduced performance, whereas others find that structured and predictable scheduling can mitigate these adverse effects and enhance employee well-being (Sultan et al., 2025; Swanson et al., 2020). Resource availability consistently correlates with performance in hospital settings, yet empirical evidence from traditional health centers remains scarce (Ziakkas et al., 2022; Ingram et al., 2023). The limited number of studies examining work engagement as a mediator further reinforces the need for research that investigates its role in linking organizational practices with performance outcomes.

On a practical level, traditional health centers in Indonesia frequently encounter challenges such as insufficient standardized training programs, irregular shift patterns, limited staffing, and constraints in resource allocation (Khan et al., 2022; Gurubhagavatula et al., 2021). These challenges may produce negative outcomes including employee fatigue, role ambiguity, low job satisfaction, diminished engagement, and ultimately lower job performance. Such conditions can adversely affect service quality and patient trust, potentially undermining the credibility of traditional health services. Therefore, it is crucial to establish evidence-based human resource management practices that strengthen workforce capability, improve scheduling efficiency, and optimize the use of available resources in these institutions (Wijayanto & Riani, 2021).

In response to these gaps, this study aims to develop a comprehensive empirical model that examines the effects of competency-based training, shift scheduling, and resource availability on employee job performance within a traditional health center setting. Additionally, the study incorporates work engagement as a mediating variable, thereby deepening the application of JD-R Theory, the Work Engagement Model, and Campbell’s Job Performance Model in the context of traditional healthcare organizations. By integrating these frameworks, the study seeks to generate new theoretical insights and practical recommendations for enhancing employee performance and organizational effectiveness. The findings are expected to contribute to improved workforce capability, better resource management, and stronger service delivery within institutions such as Sehat Harmoni Indonesia, ultimately supporting the sustainability and advancement of traditional healthcare services in Indonesia.

## Literature Review

### Theoretical Framework

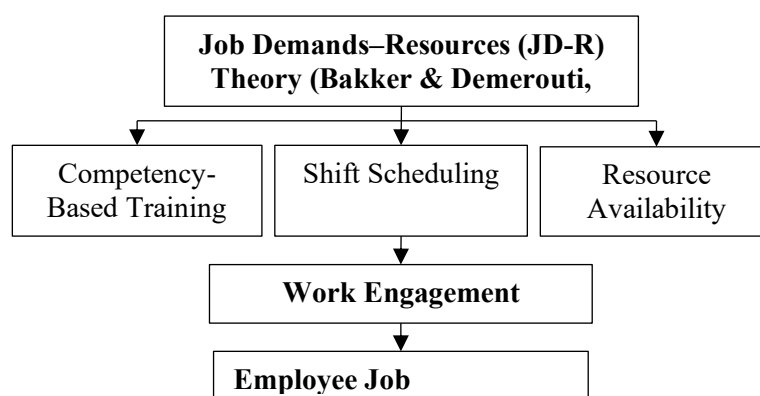


Figure 1. Theoretical Framework Model

The conceptual framework is grounded in the Job Demands Resources (JD-R) Theory, which proposes that employee outcomes are determined by the interaction between job demands and job resources (Bakker & Demerouti, 2007). In this study, competency-based training and resource availability function as job resources that strengthen employees’ abilities, motivation, and resilience by providing the necessary knowledge, tools, and organizational support (Swanson et al. 2020). Conversely, shift scheduling represents a job demand that may increase

workload strain or disrupt work–life balance, potentially reducing engagement if not well managed (Johari et al. 2022). Together, these components reflect the Job Demands–Resources premise that adequate resources enhance engagement, while excessive demands may undermine it.

Building on this theoretical foundation, the model posits that work engagement serves as a mediating mechanism linking job resources and job demands to employee job performance. When employees receive sufficient training, have reliable access to resources, and work under balanced scheduling arrangements, they are more likely to experience vigor, dedication, and absorption core dimensions of engagement described in the Work Engagement Model (Wijayanto & Riani, 2021). Higher engagement subsequently promotes greater effort, effectiveness, and persistence in task completion, aligning with the performance determinants outlined in Job Performance Model (Corbeanu & Iliescu, 2023). Thus, the framework illustrates how organizational practices shape engagement and ultimately enhance employee performance within a traditional health-care environment.

### Hypothesis Framework

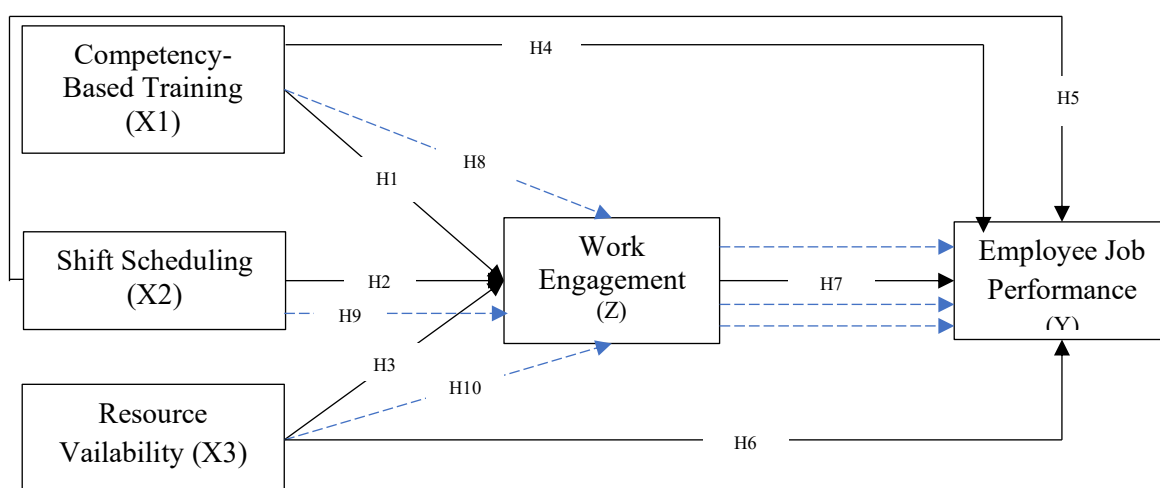


Figure 2. Hypothesis Framework

- H1: Competency-based training influence work engagement.
- H2: Shift scheduling influence work engagement.
- H3: Resource availability influences work engagement.
- H4: Competency-based training influences employee job performance.
- H5: Shift scheduling influence employee job performance.
- H6: Resource availability influences employee job performance.
- H7: Work engagement influence employee job performance.
- H8: The relationship between competency-based training and employee job performance is mediated by work engagement.
- H9: The relationship between shift scheduling and employee job performance is mediated by work engagement.
- H10: The relationship between resource availability and employee job performance is mediated by work engagement.

## Operational Definition Of Research Variables

### Conceptual Framework

Operational definitions describe the key variables used in the study by providing specific boundaries and conceptual understanding. The operational definitions of the main variables are presented in Table 1 as follows:

Table 1. Operational Definition Of Research Variables

Variable	Dimension	Indicator	Source
<b>Competency-Based Training (X1)</b>	Training Relevance	Training materials match job requirements Training improves technical competence	Khan et al. (2022); Ziakkas et al. (2022); Sultan et al. (2025)
	Training Method Effectiveness	Training methods are easy to understand Trainers deliver content effectively	
	Skill Acquisition	Training enhances practical job skills Training increases confidence at work	
<b>Shift Scheduling (X2)</b>	Scheduling Fairness	Shifts are allocated fairly Scheduling does not excessively burden employees	Ryu et al. (2023); Nobil et al. (2022); Downes & Lee, (2023)
	Work-Life Balance	Shift schedules support work-life balance Shifts do not interfere with personal activities	
	Shift Flexibility	Ability to swap shifts when needed Staff can adjust shifts during emergencies	
<b>Resource Availability (X3)</b>	Work Tools Availability	Work tools are available when needed Tools are in good working condition	Asamani et al. (2025); Chang & Chen, (2020)
	Information & Support Resources	Work-related information is accessible Supervisory support is available when required	
	Facility Adequacy	Workplace facilities are adequate Supportive equipment is easy to use	
<b>Work Engagement (Z)</b>	Vigor	Feeling energetic at work Being enthusiastic while working	Lai et al. (2020); Tisu et al. (2020)
	Dedication	Feeling proud of work Considering work meaningful	
	Absorption	Being fully concentrated on work Difficulty detaching from work due to deep involvement	
<b>Employee Job Performance (Y)</b>	Task Performance	Completing tasks according to standards Accuracy and quality of work results	Lai et al. (2020); Tisu et al. (2020)
	Effort & Persistence	Putting strong effort into tasks Maintaining consistent performance	
	Job Knowledge & Skills	Understanding work procedures Applying job skills effectively	

## Methods

### Research Design

This study adopts a quantitative approach with a correlation research design to explore the relationships between the variables and test the proposed hypotheses. A quantitative approach is appropriate for examining causal relationships and providing objective, measurable data to evaluate the influence of various factors. The correlation design focuses on identifying the strength and direction of relationships between independent, dependent, and mediating variables in the study. Structural Equation Modeling (SEM) using Partial Least Squares (PLS) was employed as the primary analytical method, supported by SmartPLS software. SEM-PLS was chosen for its ability to handle complex models involving multiple constructs and indicators, as well as its flexibility in analyzing both direct and indirect effects. This analytical approach is particularly advantageous for studies with non-normal data distributions or relatively small sample sizes.

The cross-sectional data collection design ensures that data is gathered from respondents at a single point in time, capturing a snapshot of the variables under investigation. This approach facilitates the evaluation of relationships among variables without the need for longitudinal tracking. SEM-PLS is especially suited for exploratory research contexts and provides robust results even when traditional assumptions of normality and large sample sizes are not met. By integrating SEM-PLS with a structured questionnaire and purposive sampling, this study provides a comprehensive framework for understanding how independent variables such as competency-based training, shift scheduling, and resource availability on employee job performance: the mediating role of work engagement. This methodological approach ensures both rigor and flexibility, allowing for detailed analysis of complex relationships within the dataset.

### Population and Sample

The population in this study consists of all employees of the Traditional Health Center “Sehat Harmoni Indonesia,” totaling 50 individuals. This population includes therapists, administrative staff, and operational support personnel who are directly involved in delivering traditional health services and in the implementation of competency-based training, shift scheduling, and the utilization of available work resources.

The sampling technique used in this study is saturated sampling (census sampling), in which all members of the population are included as research participants. This technique was selected because the population size is relatively small, allowing all individuals to be surveyed comprehensively. Therefore, all 50 employees who are part of the population were designated as the research sample to obtain complete, accurate, and representative data without reducing the number of respondents.

### Data Analysis

This study utilizes Partial Least Square–Structural Equation Modeling (SmartPLS 3) as the primary analytical tool due to its suitability for complex models and small-to-medium sample sizes. The analysis is carried out in two stages:

Table 2. SEM-PLS Model Evaluation Criteria

Model Component	Evaluation Aspect	Description / Threshold
Outer Model	Convergent Validity	Outer Loadings > 0.70
	Discriminant Validity	Fornell-Larcker Criterion

	Reliability	Cronbach's Alpha > 0.70 Composite Reliability (CR) > 0.70 AVE (Average Variance Extracted) > 0.50
<b>Inner Model</b>	Collinearity Test	VIF (Variance Inflation Factor) < 5
	Path Coefficient Analysis	Significance and strength of relationships (p-value, t-statistic, beta coefficient)
	Coefficient of Determination	R-Square (R <sup>2</sup> ): Indicates variance explained in endogenous variables
	Effect Size	f-Square (f <sup>2</sup> ): Indicates the impact magnitude of exogenous constructs

## Result and Discussion

### Respondent Characteristics

Table 4 presents the demographic characteristics of the respondents involved in this study, including gender, age, educational background, and years of service.

Table 4. Respondent Characteristics

No	Respondent Characteristics	Frequency	Percentage	
1	Gender	Male	36	72%
		Female	14	28%
2	Age	25 - 30 Years	13	26%
		31 - 35 Years	10	20%
		36 - 40 Years	5	10%
		41 - 45 Years	5	10%
		46 - 50 Years	13	26%
		51 - 55 Years	4	8%
3	Highest Education	High/Vocational School	8	16%
		Diploma	21	42%
		Bachelor's Degree (S1)	11	22%
		Master's Degree (S2)	10	20%
4	Length of Service	1 - 5 Years	15	30%
		6 - 10 Years	13	26%
		11 - 15 Years	11	22%
		16 - 20 Years	11	22%

The data show that most respondents are male (72%) and a significant proportion are within two main age groups: 25–30 years and 46–50 years (each 26%). In terms of educational background, Diploma holders make up the largest group (42%), followed by Bachelor's degree graduates (22%). Additionally, the majority of respondents have work experience ranging from 1–10 years, indicating a relatively young and productive workforce in the sample.

## Outer Model Evaluation

### Convergent Validity - Outer Loadings

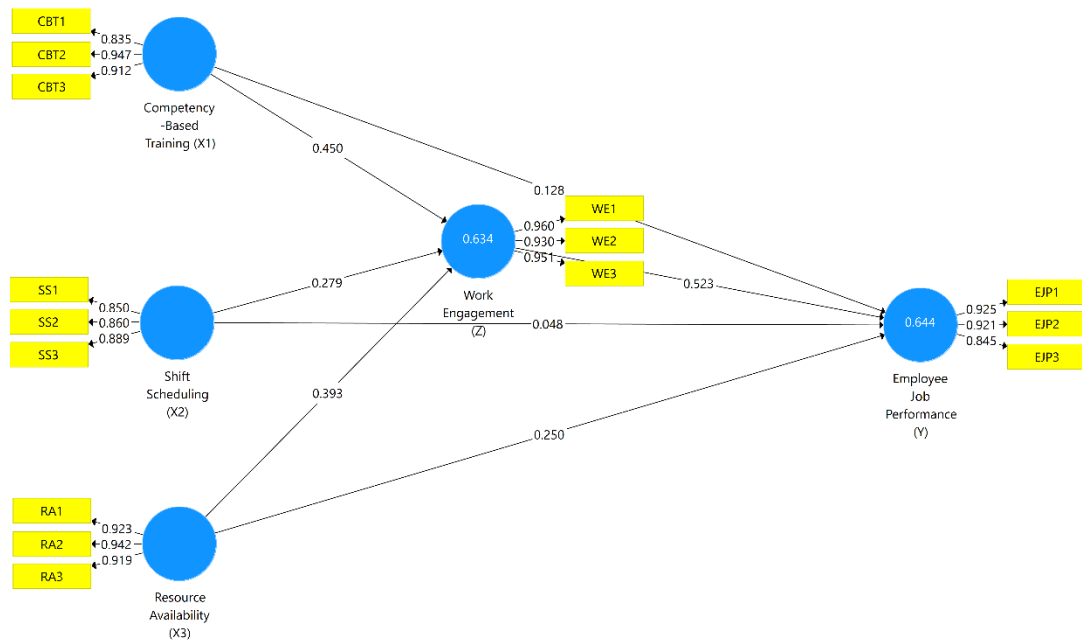


Figure 2. Outer Model

Outer loading is a primary indicator used to assess convergent validity, which refers to the extent to which indicators reflect the latent construct being measured. A loading value above 0.70 indicates that the indicator has a strong contribution in explaining the latent variable. The following are the outer loading results based on the ascending order of indicator codes:

Table 4. Outer Loading of Indicators

Latent Variable	Code	Outer Loading
Competency-Based Training (X1)	CBT1	0,835
	CBT2	0,947
	CBT3	0,912
Shift Scheduling (X2)	SS1	0,850
	SS2	0,860
	SS3	0,889
Resource Availability (X3)	RA1	0,923
	RA2	0,942
	RA3	0,919
Work Engagement (Z)	WE1	0,960
	WE2	0,930
	WE3	0,951
Employee Job Performance (Y)	EJP1	0,925
	EJP2	0,921
	EJP3	0,845

All indicators in the measurement model demonstrate strong convergent validity, as each outer loading exceeds the recommended threshold of 0.70. The Competency-Based Training indicators (0.835–0.947) show consistently high loadings, indicating that the construct is measured reliably through employees' perceptions of training quality and relevance. Employee Job Performance also exhibits strong indicator contributions, with loadings ranging from 0.845

to 0.925, reflecting a stable measurement of performance outcomes. The Resource Availability construct demonstrates excellent convergent validity, with very high loadings between 0.919 and 0.942, confirming that the availability and adequacy of work resources are captured accurately. Similarly, the Shift Scheduling indicators (0.850–0.889) show solid loading values, suggesting reliable measurement of scheduling effectiveness and employee alignment with work shifts. Work Engagement presents the highest indicator strength in the model, with loadings ranging from 0.930 to 0.960, indicating exceptional internal consistency in capturing employees' enthusiasm, dedication, and absorption in their work. Overall, these results confirm that all constructs are measured with strong reliability, supporting the robustness of the measurement model for further structural analysis.

### Discriminant Validity – Fornell-Larcker Criterion

Discriminant validity indicates the extent to which a construct is truly distinct from other constructs. According to the Fornell–Larcker Criterion, the square root of the AVE (located on the diagonal of the table) must be greater than the correlations between constructs in the corresponding rows and columns for each variable.

Table 5. Fornell-Larcker Criterion

Variable	CBT (X1)	EJP (Y)	RA (X3)	SS (X2)	WE (Z)
Competency-Based Training (X1)	0,899				
Employee Job Performance (Y)	0,539	0,898			
Resource Availability (X3)	0,325	0,617	0,928		
Shift Scheduling (X2)	0,142	0,347	0,222	0,866	
Work Engagement (Z)	0,617	0,773	0,601	0,431	0,947

The diagonal values in the matrix represent the square roots of the AVE for each construct, and all of these values are greater than the inter-construct correlations in their respective rows and columns. This confirms that the model satisfies the Fornell–Larcker discriminant validity criterion, indicating that each latent variable is more strongly related to its own indicators than to other constructs. For example, the square root of AVE for Competency-Based Training (0.899) is higher than its correlations with Employee Job Performance, Resource Availability, Shift Scheduling, and Work Engagement. Likewise, Employee Job Performance shows a diagonal value of 0.898, which exceeds its correlations with all other variables. Resource Availability (0.928), Shift Scheduling (0.866), and Work Engagement (0.947) also display diagonal values greater than their inter-construct correlations, demonstrating clear empirical distinction among constructs. Overall, these results indicate that each variable measures a unique conceptual domain and that the measurement model possesses strong discriminant validity.

### Construct Reliability and Validity

Construct reliability testing is conducted to ensure that the indicators within a construct exhibit good internal consistency. Three main measures are used: Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE).

Table 6. Construct Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Competency-Based Training (X1)	0,882	0,912	0,927	0,808
Shift Scheduling (X2)	0,835	0,848	0,900	0,751
Resource Availability (X3)	0,919	0,919	0,949	0,861

Work Engagement (Z)	0,943	0,944	0,963	0,897
Employee Job Performance (Y)	0,878	0,879	0,925	0,806

All constructs satisfy the recommended measurement criteria, with Cronbach’s Alpha, rho\_A, and Composite Reliability values consistently exceeding the 0.70 threshold, indicating strong internal consistency across all variables in the model. The AVE values for each construct are also well above 0.50, demonstrating adequate convergent validity. Competency-Based Training (CR = 0.927; AVE = 0.808) and Shift Scheduling (CR = 0.900; AVE = 0.751) both show solid reliability and variance explanation. Resource Availability exhibits particularly strong measurement quality, with high reliability (CR = 0.949) and substantial convergent validity (AVE = 0.861). Work Engagement demonstrates exceptional reliability (CR = 0.963) and the highest AVE value (0.897), indicating very strong indicator coherence. Employee Job Performance similarly shows robust reliability (CR = 0.925) and high AVE (0.806). Overall, these results confirm that the measurement model possesses excellent reliability and convergent validity, supporting its suitability for further structural model evaluation.

### Inner Model Evaluation

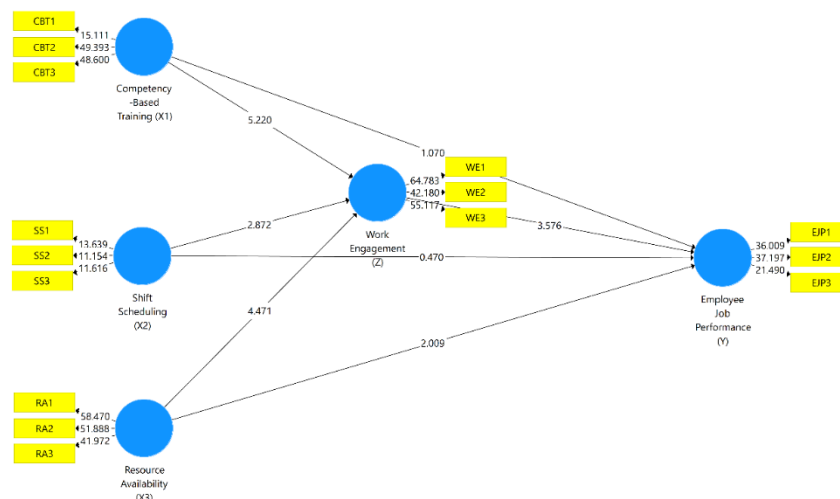


Figure 3. Inner Model

### Coefficient of Determination (R<sup>2</sup>)

The R-square (R<sup>2</sup>) value reflects the proportion of variance in the endogenous variables that can be explained by the exogenous variables in the model. A higher R<sup>2</sup> indicates a better explanatory power of the model.

Table 7. R-Square Values

Endogenous Variable	R Square	R Square Adjusted
Work Engagement (Z)	0,634	0,610
Employee Job Performance (Y)	0,644	0,613

The Work Engagement (Z) construct shows an R<sup>2</sup> value of 0.634, indicating that 63.4% of its variance is explained by the predictor variables in the model, namely competency-based training, shift scheduling, and resource availability. This reflects a strong level of explanatory power. Meanwhile, the Employee Job Performance (Y) construct has an R<sup>2</sup> value of 0.644, meaning that 64.4% of the variance in employee performance is accounted for by the combined influence of work engagement and the organizational factors included in the model. These results demonstrate that the structural model possesses substantial predictive capability and is effective in explaining variations in both work engagement and employee job performance.

## Effect Size ( $f^2$ )

Effect size ( $f^2$ ) indicates the contribution of each exogenous variable to the  $R^2$  value of the endogenous variable. Guidelines for interpretation by Cohen (1988) classify effect size as: Small: 0.02, Medium: 0.15, Large: 0.35

Table 8. Effect Size ( $f^2$ )

Exogenous Variable	Work Engagement (Z)	Employee Job Performance (Y)
Competency-Based Training (X1)	0.491 (Large)	0.027 (Small)
Shift Scheduling (X2)	0.201 (Medium)	0.005 (Very Small)
Resource Availability (X3)	0.364 (Large)	0.111 (Medium)
Work Engagement (Z)	—	0.281 (Medium)

The effect size analysis indicates that Competency-Based Training has a large influence on Work Engagement ( $f^2 = 0.491$ ), showing that training initiatives substantially enhance employees' level of engagement. However, its direct effect on Employee Job Performance is very small ( $f^2 = 0.027$ ), suggesting that the contribution of training to performance primarily occurs indirectly through other factors such as engagement. Shift Scheduling shows a medium effect on Work Engagement ( $f^2 = 0.201$ ), meaning that appropriate scheduling practices play a meaningful role in strengthening employees' involvement. In contrast, its direct effect on job performance is negligible ( $f^2 = 0.005$ ). Resource Availability demonstrates a large effect on Work Engagement ( $f^2 = 0.364$ ) and a medium effect on Employee Job Performance ( $f^2 = 0.111$ ). These results highlight that having sufficient resources not only improves employees' engagement but also supports stronger job performance outcomes. Work Engagement itself exhibits a medium influence on Employee Job Performance ( $f^2 = 0.281$ ), confirming its role as a mediating psychological mechanism that translates organizational support into performance enhancement. Overall, the effect size patterns show that Resource Availability and Competency-Based Training are the strongest determinants of Work Engagement, while Work Engagement and resource support have the most meaningful contributions to performance improvement within the organization.

## Direct Effect Analysis

To further understand the structural relationships among the constructs, the direct effects between exogenous and endogenous variables were analyzed using the path coefficients, t-values, and significance levels. The following interpretation outlines the strength and direction of influence between independent variables (Competency-Based Training, Shift Scheduling, And Resource Availability), the mediating variable Work Engagement (Z), and the dependent variable Employee Job Performance (Y) within the proposed model.

Table 10. Direct Effect

Pathway	Coefficient (O)	T-Statistic	P-Value	Significance
Competency-Based Training -> Work Engagement	0,450	5,220	0,000	Significant
Shift Scheduling -> Work Engagement	0,279	2,872	0,004	Significant
Resource Availability -> Work Engagement	0,393	4,471	0,000	Significant
Competency-Based Training -> Employee Job Performance	0,128	1,070	0,285	No Significant

Shift Scheduling -> Employee Job Performance	0,048	0,470	0,639	No Significant
Resource Availability -> Employee Job Performance	0,250	2,009	0,045	Significant
Work Engagement -> Employee Job Performance	0,523	3,576	0,000	Significant

The direct effect analysis reveals that all three exogenous variables Competency-Based Training, Shift Scheduling, and Resource Availability significantly influence Work Engagement. Competency-Based Training demonstrates a strong positive effect on Work Engagement ( $\beta = 0.450$ ,  $t = 5.220$ ,  $p = 0.000$ ), indicating that relevant and structured training enhances employees' involvement in their work. Similarly, Shift Scheduling also has a significant positive impact on Work Engagement ( $\beta = 0.279$ ,  $t = 2.872$ ,  $p = 0.004$ ), suggesting that well-managed scheduling encourages employees to remain engaged. Resource Availability shows the second-strongest effect on Work Engagement ( $\beta = 0.393$ ,  $t = 4.471$ ,  $p = 0.000$ ), highlighting that sufficient tools and facilities play an important role in supporting employees' engagement. In contrast, only two variables have a statistically significant direct impact on Employee Job Performance. Resource Availability positively influences Employee Job Performance ( $\beta = 0.250$ ,  $t = 2.009$ ,  $p = 0.045$ ), showing that adequate workplace support helps employees achieve better performance outcomes. Work Engagement itself has the strongest direct effect on Employee Job Performance ( $\beta = 0.523$ ,  $t = 3.576$ ,  $p = 0.000$ ), confirming its essential role as a psychological mechanism that drives productive behavior. Meanwhile, Competency-Based Training ( $\beta = 0.128$ ,  $p = 0.285$ ) and Shift Scheduling ( $\beta = 0.048$ ,  $p = 0.639$ ) do not show significant direct effects on employee performance, indicating that their contributions to performance improvement are likely indirect primarily through enhancing Work Engagement rather than affecting performance independently. These findings demonstrate that organizational support systems particularly adequate resources are vital in strengthening employee performance, with Work Engagement functioning as a key mediator that translates supportive workplace practices into improved job outcomes.

### Indirect Effect Analysis

The total indirect effects analysis was conducted to identify the mediating role of Work Engagement (Z) in the relationship between exogenous variables (Competency-Based Training, Shift Scheduling, And Resource Availability) and the endogenous variable Employee Job Performance (Y). This approach helps determine the extent to which Pain Self-Efficacy indirectly transmits the influence of these factors on the utilization of acupuncture therapy.

Table 11. Total Indirect Effects between Latent Variables

Pathway	Coefficient (O)	T-Statistic	p-Value	Significance
Competency-Based Training -> Work Engagement -> Employee Job Performance	0,235	2,869	0,004	Significant
Shift Scheduling -> Work Engagement -> Employee Job Performance	0,146	2,275	0,023	Significant
Resource Availability -> Work Engagement -> Employee Job Performance	0,205	2,853	0,005	Significant

The analysis of indirect effects via Work Engagement shows that all three organizational variables exert significant mediated influences on Employee Job Performance. Competency-Based Training has a positive and statistically significant indirect effect on performance

through Work Engagement ( $\beta = 0.235$ ,  $t = 2.869$ ,  $p = 0.004$ ), indicating that structured and competency-oriented training enhances employee engagement, which subsequently contributes to improved job outcomes. Shift Scheduling also demonstrates a significant indirect pathway ( $\beta = 0.146$ ,  $t = 2.275$ ,  $p = 0.023$ ). This finding suggests that effective scheduling practices foster greater employee engagement, and the resulting psychological involvement translates into better performance at work. Similarly, Resource Availability shows a significant indirect effect on Employee Job Performance through Work Engagement ( $\beta = 0.205$ ,  $t = 2.853$ ,  $p = 0.005$ ). This highlights that when employees are supported with adequate tools, facilities, and workplace infrastructure, their engagement increases, enabling them to perform more productively. These results confirm that Work Engagement serves as a strong mediator that transforms organizational support through training, scheduling, and resource provision into enhanced employee performance. This reinforces the critical role of maintaining a motivated and engaged workforce to optimize the effectiveness of organizational practices.

The results of this study indicate that Competency-Based Training has a significant positive effect on Work Engagement, which aligns well with the Job Demands–Resources (JD-R) Theory. In this framework, training functions as a key job resource that strengthens employees' cognitive and technical capabilities, enabling them to better manage job demands (Bakker & Demerouti, 2007). When employees feel more competent, they experience heightened enthusiasm and confidence, thereby increasing their level of engagement. Previous studies (e.g., Hassan et al., 2024; Khan et al., 2022; Sultan et al., 2025) have similarly concluded that competency-based training enhances motivation and engagement, particularly in high-demand service environments.

However, the findings also show that Competency-Based Training does not significantly influence Employee Job Performance directly. This suggests that competency development contributes to performance indirectly through enhanced Work Engagement, rather than producing immediate performance gains. This aligns with the motivational process of the JD-R model, which argues that improvements in capability translate into performance only when employees feel psychologically engaged with their work.

The study further reveals that Shift Scheduling significantly affects Work Engagement, confirming that fair and structured scheduling operates as a job resource supporting employees' psychological well-being. Effective scheduling can increase employees' sense of control, reduce conflict, and promote motivation (Downes & Lee, 2023; Ryu et al., 2023). Conversely, poorly managed shift systems may become a job demand that lowers engagement and harms well-being (Gurubhagavatula et al., 2021; Skýpalová et al., 2022). Nevertheless, this study found that Shift Scheduling does not have a significant direct impact on Employee Job Performance, indicating again that scheduling contributes to performance only when it successfully elevates engagement.

Resource Availability is shown to have an important role, exerting significant effects on both Work Engagement and Employee Job Performance. Adequate tools, equipment, and organizational support help employees complete their work efficiently, reducing unnecessary strain and reinforcing positive experiences at work (Chang & Chen, 2020). At the psychological level, sufficient resources strengthen feelings of security, motivation, and job satisfaction (Asamani et al., 2025). This dual influence aligns strongly with the JD-R premise that job resources simultaneously reduce demands and foster engagement, ultimately leading to enhanced performance.

The finding that Work Engagement significantly improves Employee Job Performance further supports its role as a critical motivational mechanism within the JD-R model. Engaged employees devote more energy, focus, and persistence to their tasks, which leads to higher quality work outcomes (Lai et al., 2020; Corbeanu & Iliescu, 2023). Importantly, Work

Engagement is also confirmed as a significant mediator linking Competency-Based Training, Shift Scheduling, and Resource Availability to performance improvements. This aligns with prior research showing that employees perform better when they feel meaningfully involved and supported in their roles (Chen et al., 2022; Contreras et al., 2020).

These findings reinforce that job resources are essential drivers of both engagement and performance in traditional health service organizations. While competency-based training and fair scheduling do not directly boost performance, they become impactful organizational practices when they successfully enhance Work Engagement. Meanwhile, ensuring adequate resources not only facilitates work efficiency but also strengthens employees' motivation to perform effectively. In line with the JD-R Theory, the evidence highlights that cultivating an engaged workforce is fundamental for translating organizational support into optimal job outcomes. Therefore, prioritizing strategic investment in training quality, resource sufficiency, and supportive scheduling systems is crucial for sustaining a productive and high-performing workforce.

Explain the results of the research in the form of problem-solving analyzed using relevant theories. The results of the study also revealed the findings of the research. Discussion is accompanied by logical arguments by linking the results of research with theory, the results of other studies

## Conclusion

This study concludes that Competency-Based Training, Shift Scheduling, and Resource Availability play an essential role in enhancing Work Engagement among employees in traditional health service settings. Among these variables, Resource Availability is the only factor that shows a significant direct effect on Employee Job Performance, highlighting the importance of adequate tools and workplace support in enabling employees to perform effectively. Meanwhile, Competency-Based Training and Shift Scheduling do not directly improve performance; however, their positive impacts become meaningful through the mediating role of Work Engagement. These findings confirm that Work Engagement is a strong psychological mechanism that transforms supportive organizational practices into improved job outcomes, reinforcing the relevance of the Job Demands–Resources (JD-R) Theory in explaining performance dynamics within health organizations.

Based on these results, future research is recommended to extend the current model by incorporating additional variables such as work motivation, leadership style, organizational culture, or job satisfaction to gain a more comprehensive understanding of performance determinants. Longitudinal research designs are also suggested to observe the development of engagement and performance over time, as the present study uses a cross-sectional approach. In addition, expanding the study population to include more traditional health centers or diverse healthcare settings would enhance generalizability. Qualitative or mixed-method approaches may further enrich insights into how training, scheduling, and resource support shape employees' perceptions, engagement, and work effectiveness. These recommendations are expected to contribute to the development of more strategic human resource management practices in the traditional healthcare sector, supporting both employee well-being and organizational performance.

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