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Original Research Article

CONTINUOUS TRAINING AS A DETERMINANT OF EMPLOYEE CONFIDENCE AND CARE QUALITY IN HOSPITALS: A MULTI-DIMENSIONAL WORKFORCE PERFORMANCE ANALYSIS

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ABSTRACT

Background: In today's healthcare industry, employee competence and service quality are of utmost importance. Continuous training improves employee competence and improves patient care quality. The main objective of this study was to evaluate how continuous training provided in a hospital increases employee confidence and thereby changes in service quality.
Materials and Methods: This study is a cross-sectional study. Data were collected from a total of 62 hospital employees. A structured questionnaire was used. The data were analyzed using CFA and SEM methods.
Results: The results of this study showed that continuous training significantly increases employee confidence ($\beta = 0.62$, $p < 0.001$). Furthermore, employee confidence increases service quality ($\beta = 0.54$, $p < 0.001$). Training also directly affects service quality ($\beta = 0.31$, $p = 0.002$).
Conclusion: This study confirms that continuous training in hospitals is a key factor in increasing staff confidence and improving service quality. Therefore, it is essential for hospitals to implement quality training programs.
Keywords: Inservice Training, Quality of Health Care, Work Performance, Self- Efficacy, Social Support.

INTRODUCTION

In today's medical field, providing quality service to patients is of utmost importance. Hospitals act with the responsibility of protecting the welfare of patients. In this context, the skills, knowledge, and performance of medical staff directly affect the quality of service. The success of a hospital largely depends on how its staff perform (Wati et al., 2026; Tobing, 2025). Technological development in the medical field is taking place very rapidly. New tools, new treatment methods, and new medical procedures are constantly being introduced. As a result, the need for medical staff to update their knowledge has increased. An important way to meet this need is through continuous training. Training improves the skills of staff and increases their work efficiency (Mehale et al., 2021; Fitriansyah & Indiyati, 2025; Alharbi & Aloyuni, 2023).

Training is not just about imparting knowledge; it also changes the mindset of staff. In particular, training serves as an important tool to increase staff confidence. If an employee is confident in his or her work, he or she will perform accurately and responsibly. This improves the quality of service provided to patients. Several studies confirm that there is a positive relationship between training and self-confidence (Shafiey & Karimiankakolaki, 2025; Gesme et al., 2010). Furthermore, training also plays an important role in increasing the performance of employees. Studies show that training and skill development directly increase employee performance (Fitriansyah & Indiyati, 2025; Dao et al., 2025). Through this, hospitals are able to provide quality and safe service to patients.

The quality of medical service is affected by many factors. The most important of them are employee competence, work environment, manager support, and team cooperation. Work environment and organizational factors affect employee performance and service quality (Alkhathlan, 2025; Stankovic & Slavkovic, 2025; Diana, 2022). Similarly, manager support and team cooperation also play an important role in increasing employee confidence (Slåtten et al., 2023). Many studies have shown that training in hospitals plays a significant role in improving service quality. In particular, there is a significant positive relationship between training and service quality (Kumar, 2024; Damery et al., 2021; Gil-Lacruz et al., 2019). Furthermore, when training is provided, it increases employee engagement and satisfaction (Dao et al., 2025).

But in spite of all those investigations, there are very few researches analyzing all these three factors like training, trust, and quality of services together. In other words, there are very few researches examining all the mentioned factors within one model within the healthcare context using sophisticated analysis techniques, like SEM. On the one hand, there are some research findings confirming direct influence of training on service quality. On the other hand, some researchers have proven that there is indirect influence of training on service quality due to the trust factor (Fakih, 2025; Alshraa et al., 2024). These contradictory results further emphasize the need for this study. Thus, this study examines in detail how continuous training provided in hospitals affects employee trust and thereby the change in service quality. Furthermore, this study also evaluates whether employee trust acts as a mediating factor through Structural Equation Modeling (SEM).

MATERIALS AND METHODS

This study was designed as a cross-sectional descriptive study. The study was conducted among hospital employees. A total of 62 participants participated in the study. These included employees working in various departments such as nursing, technical, administrative and support services. The participants were selected through convenience sampling method. The aim of this study was to examine the relationship between continuous training, employee confidence and care quality.

Data for this study were collected through a structured questionnaire. The questionnaire had two main parts. The first part contained socio-demographic details of the participants. The second part contained opinion questions measuring continuous training, employee confidence, care quality, supervisor support, peer collaboration and training environment. All opinion questions were measured using a 5-point Likert scale, where 1 indicates “strongly disagree” and 5 indicates “strongly agree”.

In this study, continuous training was taken as an independent variable, employee confidence as a mediating variable, and care quality as a dependent variable. Supervisor support, peer collaboration, and training environment were also added as additional explanatory variables. Analysis of the obtained data was done using statistical analysis. Mean, standard deviation, frequency, and percentage were first computed using descriptive statistics. Then, the validity and reliability of each construct was evaluated using Confirmatory Factor Analysis (CFA). In this, factors such as factor loading, composite reliability (CR), and average variance extracted (AVE) were used. Subsequently, relationships and paths between variables were evaluated using Structural Equation Modeling (SEM). Path coefficient (β value), standard error, and p-value were calculated.

Furthermore, measures such as Chi-square/df, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) were used to evaluate the model fit. Since these measures were within acceptable limits, the model showed good model fit. Prior informed consent was obtained from all employees who participated in this study and Confidentiality of their data was fully maintained.

RESULTS

A total of 62 hospital staff participated in this study. The sociodemographic and occupational characteristics of the participants are shown in Table 1. The mean age of the participants was 28.60 ± 7.82 years. In terms of gender, females (58.1%) were more prevalent than males (41.9%). In terms of educational attainment, most of the participants were undergraduates (54.8%). In terms of field, nursing was the most prevalent (45.2%). Most of the participants were full-time employees (98.4%).

Table 1: Demographic Characteristics of the Study Participants (n = 62)

Variable	Category	Mean ± SD/n(%)
Age (years)		28.60 ± 7.82
Gender	Male	26 (41.9)
	Female	36 (58.1)
Highest Educational Qualification	Diploma	23 (37.1)
	Undergraduate (UG)	34 (54.8)
	Postgraduate (PG)	4 (6.5)
	Doctorate	1 (1.6)
Department	Nursing	28 (45.2)
	Technical	13 (21.0)

	Support Services	12 (19.4)
	Administration	9 (14.5)
Employment Type	Full-time	61 (98.4)
	Part-time	1 (1.6)

Confirmatory Factor Analysis (CFA) was used to evaluate the measurement model (Table 2). In this, the standardized factor loading for all constructs was above 0.70. This indicates that each question accurately measured the construct. Furthermore, the Composite Reliability (CR) values were all above 0.70, and the Average Variance Extracted (AVE) values were above 0.50. This confirms that the model has good reliability and validity.

Table 2: Measurement Model: Confirmatory Factor Analysis (CFA)

Latent Construct	Observed Variable	Standardized Loading	CR	AVE
Continuous Training (CT)	Active participation	0.78	0.88	0.65
	Well-organized training	0.81		
	Updated training content	0.83		
	Organizational encouragement	0.76		
Employee Confidence (EC)	Task effectiveness	0.84	0.93	0.61
	Calm under pressure	0.80		
	Problem solving	0.88		
	Goal achievement	0.82		
	Training-based confidence	0.79		
Care Quality (CQ)	Protocol adherence	0.86	0.91	0.60
	Accuracy & timeliness	0.81		
	Patient feedback	0.83		
	Improved outcomes	0.88		
Supervisor Support (SS)	Guidance & feedback	0.85	0.86	0.61
Peer Collaboration (PC)	Team communication	0.83	0.84	0.57
Training Environment (OTE)	Learning support	0.87	0.88	0.64

Note: All standardized loadings > 0.70, CR > 0.70, and AVE > 0.50, confirming convergent validity.

Structural Equation Modeling (SEM) was used to evaluate the relationships between variables (Table 3). The results showed that continuous training significantly increases employee confidence ($\beta = 0.62$, $p < 0.001$). That is, the more training, the more employees' confidence increases. Similarly, employee confidence increases service quality ($\beta = 0.54$, $p < 0.001$). Thus, it is understood that employees who act with confidence provide quality service to patients. Furthermore, continuous training directly affects service quality ($\beta = 0.31$, $p = 0.002$). Thus, it is clear that training affects service quality both directly and indirectly (through confidence). Furthermore, employee confidence increases their performance and compliance ($\beta = 0.48$, $p < 0.001$). Supervisor support increases employee confidence ($\beta = 0.29$, $p = 0.001$). Peer collaboration improves service quality ($\beta = 0.26$, $p = 0.001$). Training environment also significantly affects continuous training ($\beta = 0.57$, $p < 0.001$).

Table 3: Structural Model Path Coefficients (SEM)

Structural Path	Standardized β	SE	CR	p-value
Continuous Training → Employee Confidence	0.62	0.08	7.75	<0.001
Employee Confidence → Care Quality	0.54	0.09	6.00	<0.001
Continuous Training → Care Quality	0.31	0.10	3.10	0.002
Employee Confidence → Performance & Compliance	0.48	0.11	4.36	<0.001
Supervisor Support → Employee Confidence	0.29	0.09	3.22	0.001
Peer Collaboration → Care Quality	0.26	0.08	3.25	0.001
Training Environment → Continuous Training	0.57	0.07	8.14	<0.001

The model fit assessment is shown in Table 4. The Chi-square/df value was 2.11, which is well within an acceptable range. The values of CFI (0.95) and TLI (0.94) were well beyond 0.90, thus making it a well-fitted model. Similarly, for RMSEA (0.061) and SRMR (0.048), too, acceptable values have been found. Therefore, it is established that the structural model has a good fit. Overall, the results of this study clearly show that continuous training increases the confidence of employees, thereby improving service quality.

Table 4: Model Fit Indices

Fit Index	Obtained Value	Acceptable Threshold
χ^2 / df	2.11	< 3.00
Comparative Fit Index (CFI)	0.95	≥ 0.90
Tucker–Lewis Index (TLI)	0.94	≥ 0.90
RMSEA	0.061	≤ 0.08
SRMR	0.048	≤ 0.08

The Structural Equation Model (SEM) path diagram in Figure 1 illustrates the conceptual model used in this study. This model explains the relationship between training provided in hospitals and employee performance through various variables. In this model, Organizational Training Environment is considered as an important antecedent factor (exogenous variable). It directly affects Continuous Training (γ_1). That is, when there is a good training environment, the likelihood of employees engaging in continuous training increases. Furthermore, Continuous Training directly affects employees' Employee Confidence (β_1). This shows that training increases the confidence of employees. The knowledge and skills acquired through training help employees to perform their jobs with confidence.

Next, Employee Confidence affects two main outcomes. First, it improves Care Quality (β_2). This shows that employees who act with confidence provide quality service to patients. Second, Employee Confidence increases Performance and Compliance (β_3). This improves employees' work efficiency and adherence to regulations. In this model, e_1, e_2, e_3 and e_4 are the error terms for each endogenous variable. These represent the other unexplained factors in the model. Overall, this SEM model clearly explains the relationship between training environment → continuous training → employee trust → service quality and performance. This confirms that training and human resource management play an important role in improving the quality of medical service.

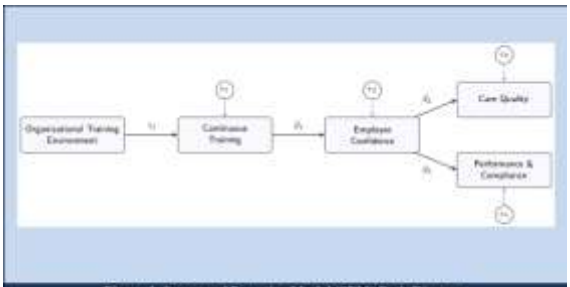

Figure 1. Structural Equation Model (SEM) Path Diagram

DISCUSSION

This study examined the relationship between continuous training provided in hospitals, employee confidence, and care quality in detail. The key findings of this study clearly show that training plays a significant role in increasing employee confidence and thereby improving service quality. First, this study showed that continuous training significantly increases employee confidence. This is consistent with previous studies. Studies have shown that training not only improves employees' skills, but also their self-confidence and attitude (Shafiey & Karimiankakolaki, 2025; Gesme et al., 2010; Dao et al., 2025). In particular, training provides employees with new knowledge and skills, which helps them perform their jobs with confidence.

Next, an important finding of this study is that employee confidence improves service quality. Employees who act with confidence can perform their jobs more accurately and quickly. This directly improves the quality of service provided to patients. Similarly, a positive relationship between employee confidence and performance has also been found in previous studies (Fakih, 2025; Fitriansyah & Indiyati, 2025).

Furthermore, this study shows that continuous training directly affects service quality. Thus, it can be said that training is an important management tool. Several studies confirm that if quality training is provided in hospitals, it improves service quality and patient safety (Alharbi & Aloyuni, 2023; Kumar, 2024; Damery et al., 2021). Similarly, training improves the competence of employees and leads to a positive change in service quality (French, 2025; Mehale et al., 2021).

An important strength of this study is that it shows that employee confidence acts as a mediating factor between training and service quality. That is, training increases employee confidence, thereby improving service quality. Although this result has only been partially observed in previous studies, this study clearly demonstrates it (Fakih, 2025; Alshraa et al., 2024).

Furthermore, this study found that organizational factors such as supervisor support and peer collaboration also play an important role. Manager support increases employee trust, and team collaboration improves service quality. This confirms that work environment and organizational factors affect employee performance (Alkhathlan, 2025; Stankovic & Slavkovic, 2025; Slåtten et al., 2023).

Another important finding of this study is that the training environment also directly affects continuous training. If a good training environment is created, employees will be more engaged in training. Thus, the usefulness of training will increase. Similarly, studies suggest that training quality and training organization affect employee performance (Alshraa et al., 2024; Gil-Lacruz et al., 2019).

Furthermore, this study provides important practical implications for human resource management (HR management) and hospital administration. Hospitals should focus on providing continuous training. In particular, training programs should be designed to increase employee trust. This will improve service quality and increase patient satisfaction (Alharbi & Aloyuni, 2023; Kumar, 2024).

However, this study has some limitations. This study was conducted with a small sample size (n = 62). Furthermore, this study was conducted in only one hospital. Therefore, these results cannot be generalized to all hospitals. Future studies should be conducted with larger sample sizes and in different hospitals. Furthermore, a longitudinal study would allow a more clear understanding of the long-term effects of the training.

CONCLUSION

This study clearly illustrates the relationship between continuous training provided in hospitals, employee confidence, and care quality. The results of the study confirm that training increases employee confidence, thereby improving service quality. Furthermore, it was found that training directly affects service quality. Thus, it is clear that employee confidence acts as an important mediating factor. Furthermore, factors such as supervisor support, peer collaboration, and training environment also play an important role in employee performance and service quality. Therefore, hospitals should develop quality and continuous training programs to improve employee skills and confidence. Overall, this study provides useful guidance for hospital management. In the future, it is necessary to expand this study with a larger sample size and in different hospitals.

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