

## Mediating Role of Job Embeddedness on the Relation Between Psychosocial Safety Climate and Emotional Labor of Staff Nurses

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### Abstract

**Background:** Recently, health care settings have granted increased attention to nurses' emotional labor due to its effect on the quality of their performance. Job embeddedness is well proved to greatly influence nurses' performance and fosters positive and green workplace practices, so it is expected to enhance nurses' emotional labor. **Aim :**To assess the mediating role of job embeddedness on relation between the psychosocial safety climate and emotional labor of staff nurses. **Subjects and Method: Design:** An exploratory descriptive. **Setting:** Inpatient medical, surgical, and intensive care units at Benha University Hospital., Egypt. **Subjects:** A simple random sample of staff nurses who met inclusion criteria, their final size was 370 out from 1220 staff nurses. **Data collection:** Three tools were utilized. Job embeddedness questionnaire, psychosocial safety climate questionnaire, and Emotional labor scale. **Results:** There were moderate levels of job embeddedness and psychosocial safety climate as perceived by over half of the nursing staff studied. Also, staff nurses had a moderate level of emotional labor as reported by more than half of them. **Conclusion:** There were highly significant positive correlations among overall scores of emotional labor, job embeddedness and psychosocial safety climate. Moreover, job embeddedness had indirect significant role partially mediated the relation between psychosocial safety climate and emotional labor. **Recommendations:** Nursing managers should develop a series of activities to improve nurses' job embeddedness, and also develop organizational strategies that maintain good psychosocial safety working climate.

**Keywords:** Emotional labor, Job Embeddedness, Psychosocial Safety Climate, Staff nurses

## Introduction

Nursing is fundamental to every healthcare system, playing a vital role in the health and well-being of all individuals. However, nurses are currently grappling with the challenges of excessive workloads from overtime and double shifts, alongside increasing incidents of workplace bullying. These factors contribute to decreased morale and emotional fatigue, with diminished job satisfaction (Islam & Chaudhary, 2022; Ahmad et al., 2023).

Lee and Jang (2019) stated that nursing is inherently an emotionally charged profession. Like any other job, nurses experience both good and bad days. However, the nursing profession may be more emotionally taxing than many positions in the service industry, as nurses often care for physically and/or mentally vulnerable patients. This requires them to engage in a significant amount of emotional labor, not only to enhance patient care but also to safeguard their own psychosocial and physical health. Indeed, emotional labor is a crucial aspect of being a nurse.

Emotional labor can be defined as to the ability to regulate individual feelings to arrange in a line with organizational objectives and display guidelines, regardless of actual feelings. This involves employees employing various emotional regulation strategies in the workplace (Grandey et al., 2015). Emotional labor involves how employees manage their emotions to meet job demands, which is especially

pertinent for nurses who interact directly with patients. As frontline service providers, nurses must carefully regulate their emotional expressions, striving to genuinely feel and convey appropriate emotions while adhering to the organization's emotional display rules (Hur et al., 2015; Chen et al., 2019).

The emotional regulation strategies related to managing emotional labor include: surface acting, deep acting. Surface acting, often described as "acting in bad faith," involves suppressing one's true feelings and artificially altering emotions to fit desired outcomes. This manipulation of emotional expression is influenced by societal expectations or performance rules (display rules) that vary by situation (Jeung et al., 2018). Surface acting involves presenting a façade of emotions, often described as wearing an emotional mask. The result of Surface acting can involve either pretending to display an emotion or faking an expression when the underlying emotion isn't genuinely felt or suppressing true emotions to prevent them from being expressed. This approach can lead to negative outcomes, including departure, absence, turnover, and emotional exhaustion (Grandey & Gabreil 2015). Surface acting is considered necessary for job achievement. Typically, when true emotions are concealed, it leads to emotional dissonance, where an individual experiences a mismatch between their internal feelings and outward expressions. This incongruence can result in psychosocial strain, burnout, and

depersonalization (**Hatzinikolakis & Crossman, 2020**). In contrast, deep acting, often referred to as “acting in good faith,” involves genuinely feeling and striving to experience the desired emotions. This approach results in authentic emotional displays that align with one’s true feelings. (**Moin et al., 2021**).

Emotional labor and psychosocial safety climate (PSC) are two essential concepts in organizational psychology that greatly influence employee well-being and organizational effectiveness. The dynamics of emotional labor can be associated with nurses' stress and health, as well as the well-being linked to the psychosocial safety climate, which can result in either positive or negative outcomes for nurses or their performance. Nurses who engage in emotional labor with good intent have reported experiencing lower levels of emotional exhaustion and burnout, as a result it enhances psychosocial safety climate and improves the quality of patient care. The connection between emotional labor and the psychosocial safety climate is complex, highlighting necessity of fostering supportive work environments. This in accordance with **Zadow et al., (2017)** who mentioned that organizations that promote a positive PSC can better assist employees in managing the challenges of emotional labor, ultimately enhancing both well-being and overall performance.

Organizational safety climate refers to the collective perceptions and feelings of the organization

individuals regarding the features of work climate. This climate typically arises from individual members' psychosocial perceptions of the workplace they are in (**Song et al., 2024**). According to **Nemmers, (2023)**, (PSC) is a crucial management practice which emphasizes organizational procedures, & practices and policies aimed at safeguarding employees' psychosocial wellbeing and security. When employees feel that their psychosocial safety is prioritized in the workplace, they believe they will not face punishment or embarrassment for expressing their concerns, ideas, or mistakes.

Additionally psychosocial safety climate is a concept that denotes collective certainty among employees that their psychosocial health and safety are upheld. It encompasses four key domains: **First:** management support and commitment: prioritizing stresses prevention over active involvement and commitment. **Second:** management priority: balancing the importance of psychosocial well-being with productivity goals. **Third:** communication: facilitating open dialogue among the organization and staff concerning psychosocial wellbeing and safety matters. **Fourth:** managerial sharing: encouraging employee participation in initiatives aimed at guarding their psychosocial well-being (**Klinfelter et al., 2021**).

PSC besides Job Embeddedness are interrelated constructs that significantly influence employee well-being and retention. PSC

denotes to the mutual insights within an organization concerning the policies, practices, and procedures that foster psychological health. A strong PSC fosters a supportive environment where employees feel valued and secure, enhancing their commitment to the organization. Job Embeddedness, on the other hand reflects the degree to which employees sense associated to their job and the organization, encompassing factors such as fit, links, and sacrifice (Gibbs, 2021).

According to **Chih and Teng, (2024)** when PSC is high workers are likely to achieve higher job satisfaction and emotional safety, which in turn strengthens their job embeddedness. This connection not only reduces turnover intentions but also cultivates a more resilient workforce, ultimately benefiting both employees and the organization as a whole.

Job embeddedness refers to the network of relations where an individual can establish within work environment encompassing the organizational factors that encourage an employee to remain in their position. This attachment leads to a sense of being embedded in their job. Specifically for nurses, job embeddedness involves the progressive issues that motivate nursing executives to retain nursing staff in working roles. (Song et al., 2024). According to **Shah and Rsool, (2020)**, they described job embeddedness (JE) as a strategic approach within healthcare organizations aimed at improving nurses' retention. JE is seen such as a blend of psychosocial, personal in

addition to professional factors encourage nurses to remain in their positions.

Job embeddedness involves three dimensions namely; link, and sacrifices, "Link" states to a nurse's links and relationships with others, including sharing in decision-making, service commissions, and work teams. The more connected nurses, they will remain at the hospital, "fit" describes how well a nurse's professional commitment aligns with the organization. It reflects the compatibility between nurses and the administration's beliefs, ethics, goals, plus career necessities (Gibbs, 2021). Lastly, "sacrifice" denotes to the observed losses that nursing staff would incur if deciding to leave hospitals. These sacrifices may include reductions in payment, capitals, paid time off, sick leave, besides additional paybacks (Liu, 2018).

### **Significance of the study**

Because of the high workload, stress, and risk associated with their roles, nurse job satisfaction is decreasing, contributing to burnout, increased turnover rates, and a decline in the patient care. (Lu et al., 2016). With increasing patient population within diverse needs, nurses continually required delivering excellent healthcare in addition manage own emotions to facilitate smooth and effective nurse-patient communication. In this context, studying emotional labor of nurses plus the factors influencing which becomes highly significant (Wu et al., 2018; Gao et al., (2020).

PSC encompasses nurses' collective awareness of organizational procedures, practices, and schemes aimed at supporting their psychosocial well-being (**Dollard & Bailey, 2021**). Research has indicated that PSC contributes to creating a better work climate and helps avoid psychosocial issues and emotional exhaustion (**Parent-Lamarche & Biron, 2022**). Although a substantial research on PSC, a limited number of studies explored the relation between PSC and nurses' emotional labor.

Job embeddedness viewed as an extra reliable predictor of job results, for example nurses' retention. Also, it enhances nurses' attachment to work place, fostering cooperation, support, and emotionally connections within the workplace (**Gibbs, 2021**). While job embeddedness is recognized as a crucial factor in nursing practice, it has received limited attention in nursing research. Most prior research has concentrated on the effect of job embeddedness on results like job satisfaction, and nurses' retention, with few examining its relationship with emotional labor. Additionally, there has been little exploration of how job embeddedness mediates the relation among PSC and Emotional Labor. The present study targets to fill that gap through exploring job embeddedness mediating role in the connection between PSC and emotional labor.

### **Aim of the Study**

The current research intended to assess the mediating role of job embeddedness on the relation between psychosocial safety climate and emotional labor of staff nurses.

### **Research questions:**

- What is the level of job embeddedness as perceived by the studied staff nurses?
- What is the level of psychosocial safety climate as perceived by the studied staff nurses?
- What is the level of the studied staff nurses' emotional labor as reported by them?
- Are there correlations among total levels of job embeddedness, emotional labor, and psychosocial safety climate?
- Does job embeddedness have mediating role on the relation between psychosocial safety climate and emotional labor?

### **Subjects and Method**

#### **Research Design:**

An exploratory descriptive design was used to accomplish current study aim.

#### **Study Setting:**

The research was conducted in all inpatient medical, surgical, and intensive care units of at Benha University Hospital, Qaluobia Governorate, Egypt. The capacity of the hospital was 880 beds distributed as follows; medical building 478 beds, surgical building 384 beds and ophthalmology building 18 beds.

#### **Subjects:**

The study involved a simple random sample of staff nurses who had inclusion criteria "had at least three-years of experience in the study setting, were available at the time of data collection and accepted to participate in the study" their total number was 1220. The sample size was determined using the "Epi info program version 7", it was based on a

variance of 5%, confidence level of 95% and power of 0.80. The final number of the subject was (370) are working as follows; Medical departments (n=120), Intensive care units (n=130), and Surgical departments (n=120).

### Study Variables

- Dependent variable: Emotional labor
- Independent variable: Psychosocial safety climate
- Mediating variable: Job embeddedness.

### Tools of data collection

Three tools were used to collect the data as follows:

#### Tool I: Job Embeddedness Questionnaire

It included two parts:

**Part I:** Personal information of staff nurses, covering age, gender, marital status, educational credentials, and years of nursing experience.

#### Part II: Job Embeddedness Questionnaire

A structured questionnaire was formulated by the researchers according to an analysis of the relevant literature (Nafei, 2015; Ghaffar & Khan, 2018; Mahmoud & Obied, 2022) to assess the level of job embeddedness as perceived by staff nurses. It involved 18 items divided into 3 dimensions as distributed in the following table:

Dimensions	Number of items	Example of items
Fit-organization	6	My values and goals are consistent with the values of the organization.
Links-organization	6	My values and ambitions are aligned with those of the organization.
Sacrifice-organization	6	I am free to determine my goals.
<b>Total</b>	<b>18</b>	

### Scoring System:

Answers of staff nurses were assessed using three points Likert scale ranging from Agree (3), Neutral (2) and Disagree (1). Scores were computed by summing the averages for the elements inside each dimension, and they ranged from 18 to 54, with a cut point 60 percent = 33. Therefore, the level of Job Embeddedness was considered as the following; "High level" if the percent  $\geq 75\%$  that equals  $\geq 41$  points, "Moderate level" from 60% to less than 75% equals 33 -  $< 41$  points, and "Low level"  $< 60\%$  those equals to  $< 33$  points.

#### Tool II : Psychosocial Safety Climate Questionnaire

A structured questionnaire was developed by Dollard and Kang, (2007) and was modified by the researchers to assess the level of psychosocial safety climate as perceived by studied staff nurses. It covered four dimensions, having 26 items as distributed in the following table:

Dimensions	Number of items	Example of items
Management support and commitment	10	In my workplace managers show an affection for in my psychosocial well-being.
Management priority	5	This organization prioritizes staff psychological well-being
Organizational commitment	6	I am aware of the appropriate channels to report concerns.
Organizational participation and involvement	5	This organization encourages involvement in safety and health topics
<b>Total</b>	<b>26</b>	

### Scoring System:

The answers of staff nurses were assessed using three -points Likert scale as follows; Agree (3 degrees), Neutral (2 degrees) and Disagree (1 degree). Scores were calculated by adding an average for the items in each dimension, and they varied from 26 to 78, with a cut point at 60 percent = 47. The level of psychosocial safety climate was considered as follows; "High level" if the percent  $\geq 75\%$  equals 59 points, "Moderate level" from 60% to less than 75% equals 47 - < 59 points, and "Low level" < 60 % equals to < 47 points.

### Tool III: Emotional Labor Scale

A structured scale was developed by **Badolamenti et al., (2018)** then was used by the researchers to assess the level of emotional labor of studied staff nurses. It consisted of two dimensions covering 20 items as shown in the following table:

Dimensions	Number of items	Example of items
Surface acting	11	I hide my real emotions about situation.
Deep acting	9	I try to change my view of situations to calm down.
<b>Total</b>	<b>20</b>	

### Scoring System:

Answers of staff nurses were calculated using five-points Likert Scale ranging from "1" strongly disagree to "5" strongly agree, which was transformed into three points as follows; Agree (3), Neutral (2), and Disagree (1). Scores were computed by summing the averages for the elements inside each dimension, and they ranged from 20 to 60, with a 60 percent = 36 cut point. Therefore, the level of emotional labor was considered as the following: "High level" if the percent  $\geq 75\%$  equals 45 points, "Moderate level" from 60% to less than 75% equals 36 - < 45 points, and "Low level" < 60 % those equals to < 36 points.

### Datacollection procedure

#### Administrative Approval:

First, the Scientific Research Ethical Committee of Benha University's Faculty of Nursing provided ethical permission. The Dean of the Faculty of Nursing at Benha University then issued an official clearance letter to the Director of Benha University Hospital to facilitate data collection for the current study.

Before starting the study, the researchers met staff nurses for identifying the goal of the study and indicating that their involvement in the research is voluntary and they able to leave it at any time. Additionally, to

ensure privacy of the collected data, sheets were coded. Also, the researchers confirmed that the study will not disturb their work and they can define together the proper time for sheets distribution.

### **Operational design:**

It included the preparatory phase, the pilot research, and the fieldwork, began from the start of Jan to the mid of June 2024.

### **Preparatory phase:**

It started from start of Jan to the end of March 2024, and through the three months, National and international literature pertinent to the topic were reviewed, the researchers used textbooks, periodicals, journals, magazines, and the internet for understanding dimensions of the study concerns. The text of the tools was produced, translated into Arabic, and reliability and content validity were checked.

### **Tool reliability and validity:**

Tools of data collection were developed and tested for its content validity through five experts of Nursing Administration of various universities; two professors from Zagazig University, one professor from Ain shams University, and two professors from Cairo University.

Correctness, simplicity, relevance, clarity, and comprehensiveness were all evaluated as part of the instruments' validity. Then, researchers prepared the final verified tools. Cronbach alpha coefficient determined the internal consistency. Cronbach alphas were ( $\alpha = 0.834, 0.929$  &  $0.888$ ) for Job Embeddedness Questionnaire, Emotional Labor Scale, and

Psychosocial Safety Climate Questionnaire, respectively, which reflected acceptable level of internal consistency. It was performed at March 2024.

### **Pilot study:**

Throughout April 2024, before starting to collect data, the redesigned tools were piloted with 10% of the total subject population (37 staff nurses) to test sheet clarity and assess the feasibility and usefulness of the proposed tools. Also, to estimate the time required to fill them. No alterations were made and the pilot number added to the study subject.

### **Field work:**

Process of data collection was done in two months from the mid of April to the mid of June 2024, the researchers collected data from staff nurses by distributing the three sheets of data collection which were mentioned above in details. This was performed in between nurses' tasks when available in three days per week (Saturday, Monday, and Thursday) from 11.0 a.m to 12.30 p.m. About 12 to 13 sheets were filled daily.

Pilot nurses filled job embeddedness questionnaire in 10 to 20 minutes, 10 to 15 minutes for emotional labor scale, and from 10 to 15 minutes for psychosocial safety questionnaire. The completed forms were timely collected and reviewed to ensure no information was missing. Lastly, the pilot subject received gratitude from the researchers for their collaboration.

### **Limitations of the study:**

Owing to the nurses' workload, data gathering occasionally required a lengthy time.



### Statistical analysis:

The computer program SPSS (version 25) was used to enter and analyze the data. The following descriptive statistics were used; Mean, Standard deviation, Frequency, and Percentages. The correlation coefficient ( $r$ ), person correlation, and paired T-test were employed. A difference was deemed statistically significant when the  $p$ -value was less than 0.05 and highly significant when the  $p$ -value was less than 0.005. The variances of each sheet score as well as the overall variances were computed in order to get the Cronbach alpha coefficient. To identify direct/indirect role, Pearson's correlations, multiple linear regression analysis, and an Amos Software route analysis were used.

### Results

**Table 1** Illustrates that most of staff nurses included in the study (89.7%, 73.5%, 83.8%) were female and aged from 25 to less than 35 and had experience from 10 to 15 years, respectively. Also, three quarters (75.1%) of them were married. While, two thirds of staff nurses (67%) had certificate of Technical Nursing Institute and slightly less than two thirds of them (63.8%) had attended training courses about emotional labor.

**Table 2** shows that the total mean score for all dimensions of staff nurses' Emotional Labor were  $64.67 \pm 13.47$ . The first ranking of Emotional Labor dimensions with the highest mean percent 68.2% with mean score was  $30.67 \pm 9.08$  related to the "Deep acting" dimension. Also, the total mean score for all

dimensions of psychosocial safety climate was  $85.69 \pm 18.97$ . The first ranking of psychosocial safety climate dimensions with the highest mean percent 69.4% with mean score at  $17.36 \pm 4.77$  related to the "Organizational participation and involvement dimension". Moreover, the total mean score for all dimensions of job embeddedness were  $60.48 \pm 13.32$ . The first ranking of job embeddedness dimensions with the highest mean score was  $21.14 \pm 4.99$  with a mean percent 70.5% related to fit organization.

**Figure 1** shows that there were moderate levels of job embeddedness and psychosocial safety climate as perceived by more than half of studied staff nurses. Also, staff nurses had moderate level of emotional labor as reported by more than half of them (53.5%, 51.4%, 58.9 %) respectively.

**Table 3** indicates that a highly statistically significant positive correlation was observed among all dimensions of job embeddedness and emotional labor ( $P < 0.000^{**}$ ).

It is evident from **table 4** that there were highly statistically significant positive correlations among all dimensions of psychosocial safety climate and emotional labor ( $P < 0.000^{**}$ ).

**Table 5** shows that there were highly statistically substantial positive correlations among all dimensions of job embeddedness and psychosocial safety climate ( $P < 0.000^{**}$ ).

**Table 6** makes it crystal clear that there was highly statistically significant positive correlation among total levels of job embeddedness, psychosocial safety

climate and emotional labor ( $P < 0.000^{**}$ ).

**Table 7** makes abundantly evident that there was highly positive statistically significant relation between emotional labor and psychosocial safety climate in the presence of job embeddedness.

It is crystal clear from **Table 8 and figure 3** that the relation between psychosocial safety climate and emotional labor was increased in the presence of job embeddedness. Indicating that, job embeddedness had indirect significant role and partially mediated this relation.

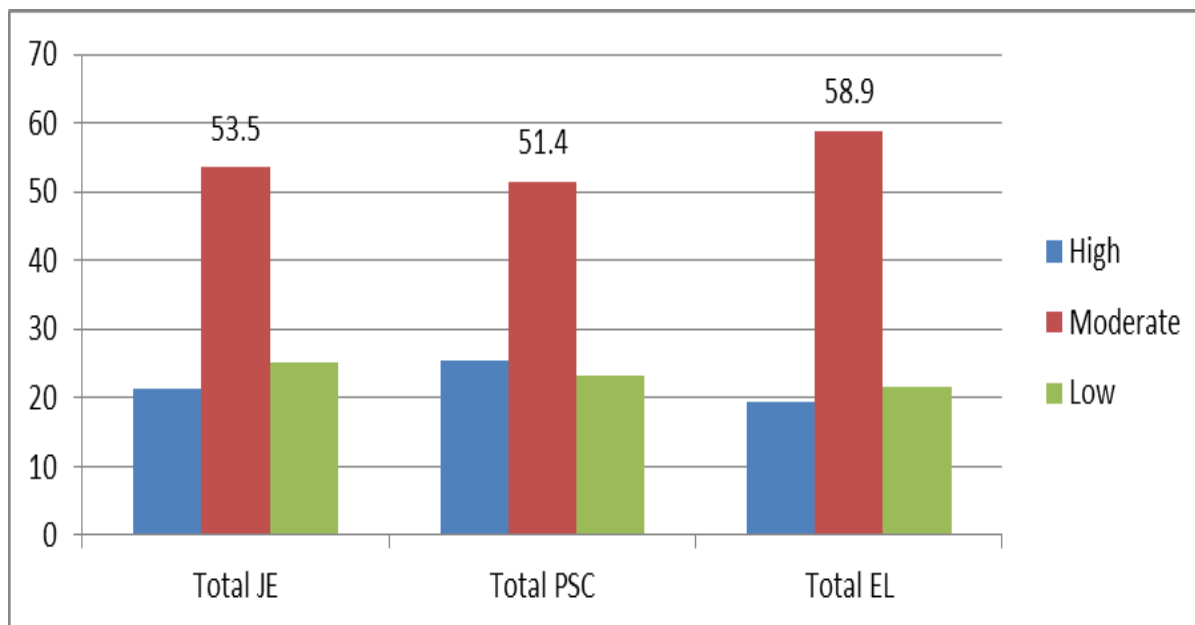
**Table (1): Distribution of personal data of the subject (n=370)**

Personal data	No.	%
<b>Gender</b>		
Male	38	10.3
Female	332	89.7
<b>Age (Years)</b>		
18-<25	74	20.0
25-35	272	73.5
>35	24	6.5
<b>Years of experience</b>		
1-<10	38	10.3
10-15	310	83.8
>15	22	5.9
<b>Marital status</b>		
Single	70	18.9
Married	278	75.1
Divorced	14	3.8
Widowed	8	2.2
<b>Educational level</b>		
Diplome	30	8.1
Technical nursing institute	248	67.0
Bachelor of nursing	92	24.9
<b>Attending training courses</b>		
Yes	236	63.8
No	134	36.2

**Table (2): Mean and standard deviation of study variables (n=370)**

Variables	Min	Max	Mean ± SD	Score%	Ranking
<b>Emotional Labor Dimensions</b>					
Surface acting	11.0	46.0	33.99±6.83	61.8%	<b>2</b>
Deep acting	9.0	45.0	30.67±9.08	68.2%	<b>1</b>
<b>Total emotional labor</b>	<b>20.0</b>	<b>85.0</b>	<b>64.67±13.47</b>	<b>64.7%</b>	
Management support and commitment	10.0	50.0	32.83±8.06	65.7%	<b>3</b>
Management priority	5.0	25.0	15.09±4.30	60.4%	<b>4</b>
Organizational commitment	6.0	30.0	20.40±4.81	68.0%	<b>2</b>
Organizational participation and involvement	5.0	25.0	17.36±4.77	69.4%	<b>1</b>
<b>Total psychosocial safety climate</b>	<b>26.0</b>	<b>130.0</b>	<b>85.69±18.97</b>	<b>65.9%</b>	
Fit-Organization	6.0	30.0	21.14±4.99	70.5%	<b>1</b>
Links-organization	6.0	28.0	19.87±5.14	66.2%	<b>2</b>
Sacrifice-organization	6.0	30.0	19.45±5.40	64.8%	<b>3</b>
<b>Total job embeddedness</b>	<b>18.0</b>	<b>84.0</b>	<b>60.48±13.32</b>	<b>67.2%</b>	

**SD:** Standard deviation



**Figure (1): Total Levels of study variables among the studied subject (n=370)**

**Table (3): Correlations matrix among dimensions of job embeddedness and emotional labor (n=370)**

Job embeddedness dimensions		Emotional labor dimensions		
		Surface acting	Deep acting	Total emotional labor
Fit-Organization	r	0.271	0.439	0.475
	p-value	0.006**	0.000**	0.000**
Links-organization	r	0.261	0.377	0.496
	p-value	0.009**	0.000**	0.000**
Sacrifice-organization	r	0.258	0.371	0.502
	p-value	0.001**	0.000**	0.000**
Total job embeddedness	r	0.411	0.514	0.604
	p-value	0.000**	0.000**	0.000**

r= Pearson correlation coefficient test.

\* Statistically significant at  $p < 0.05$ .\*\* Highly statistically significant at  $p < 0.01$ .**Table (4): Correlations matrix among dimensions of psychosocial safety climate and emotional labor (n=370)**

Psychosocial safety climate dimensions		Emotional labor dimensions		
		Surface acting	Deep acting	Total emotional labor
Management support and commitment	r	0.344	0.210	0.333
	p-value	0.000**	0.036*	0.000**
Management priority	r	0.016	0.292	0.241
	p-value	0.875	0.001**	0.016*
Organizational commitment	r	0.155	0.281	0.294
	p-value	0.123	0.005**	0.003**
Organizational participation and involvement	r	0.124	0.267	0.264
	p-value	0.220	0.007**	0.008**
Total psychosocial safety	r	0.332	0.354	0.510
	p-value	0.001**	0.000**	0.000**

r= Pearson correlation coefficient test

No statistically significant at  $p > 0.05$ .\* Statistically significant at  $p < 0.05$ .\*\* Highly statistically significant at  $p < 0.01$ .

**Table (5): Correlations matrix among dimensions of psychosocial safety climate and job embeddedness (n=370)**

Psychosocial safety climate dimensions		Job embeddedness dimensions			
		Fit-Organization	Links-organization	Sacrifice-organization	Total job embeddedness
Management support and commitment	r	0.402	0.307	0.159	0.463
	p-value	0.000**	0.002**	0.114	0.000**
Management priority	r	0.527	0.383	0.403	0.523
	p-value	0.000**	0.000**	0.000**	0.000**
Organizational commitment	r	0.425	0.330	0.374	0.529
	p-value	0.000**	0.001**	0.000**	0.000**
Organizational participation and involvement	r	0.422	0.350	0.458	0.449
	p-value	0.000**	0.000**	0.000**	0.000**
Total score of psychosocial safety climate	r	0.660	0.457	0.534	0.756
	p-value	0.000**	0.000**	0.000**	0.000**

r= Pearson correlation coefficient test.

No statistically significant at  $p > 0.05$ .\* Statistically significant at  $p < 0.05$ .\*\* Highly statistically significant at  $p < 0.01$ .**Table (6): Correlations among total scores of job embeddedness, psychosocial safety climate and emotional labor**

Variables	Total emotional labor		Total psychosocial safety climate	
	r	P-value	R	P -value
Total emotional labor			<b>0.552</b>	<b>0.000**</b>
Total job embeddedness	<b>0.629</b>	<b>0.000**</b>	<b>0.759</b>	<b>0.000**</b>

r= Pearson correlation coefficient test \*\*highly statistically significant at  $p < 0.01$ .

**Table (7): Best fitting multiple linear regression for emotional labor**

Items	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	<i>B</i>	Std. Error	$\beta$		
Constant	21.015	3.015		6.969	0.000**
Total psychosocial safety climate	0.097	0.049	0.125	1.982	0.048*
Total job embeddedness	0.563	0.070	0.509	8.058	0.000**
Model Summary					
Model	R		R Square	Adjusted R Square	Std. Error of the Estimate
1	0.609		0.371	0.368	11.70264
ANOVA					
Model	Df.		F	P. value	
Regression	2		108.351	0.000**	

a. Dependent Variable: Total emotional labor

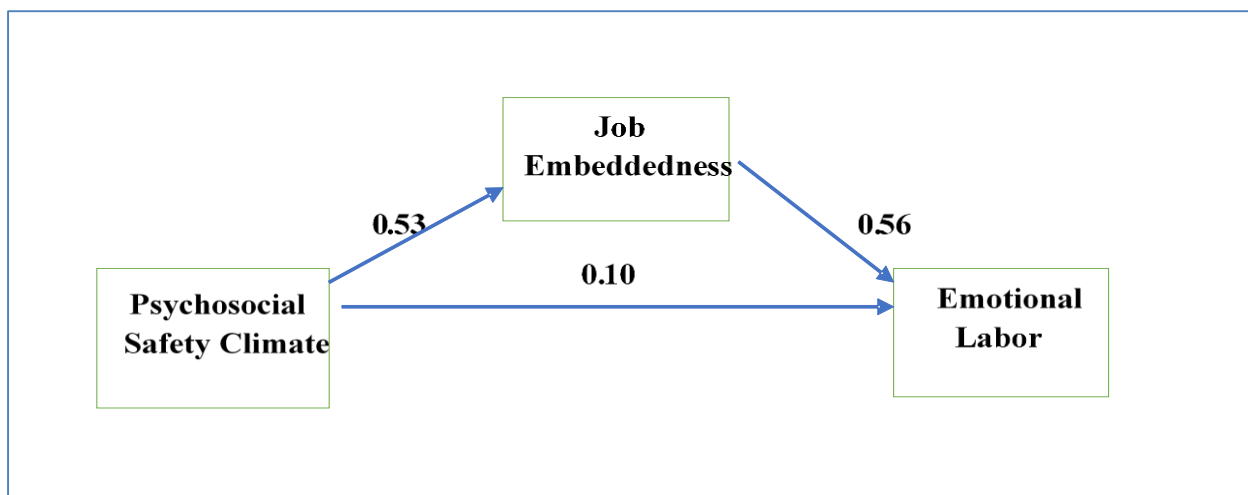
b. In Dependent Variable (constant): Psychosocial safety climate

c. Mediator: Job embeddedness

**Table (8): Structural Model of Hypothesized Direct and Indirect Effects**

Hypotheses/Path	Estimate	Standard Error	T Value	P-Value	Decision
Direct effects					
PSC → JE	0.532	0.024	22.15	0.000**	Supported
PSC → EL	0.097	0.049	1.988	0.047*	Supported
JE → EL	0.563	0.070	8.080	0.000**	Supported
Indirect effect					
PSC -> JE -> EL	0.299	0.039	5.063	0.000**	Supported

EL: Emotional Labor    JE: Job Embeddedness    PSC: Psychosocial Safety Climate



**Figure 2: Structural model of hypothesized indirect role of job embeddedness**

### Discussion

Nurses must be able to control their emotions in order to meet organizational goals. Failure to manage emotions appropriately may result in unfavorable repercussions for nurses, such as excessive emotional labor behavior, turnover intention, and emotional weariness (Liu et al., 2020). The current study sought to examine the mediating role of job embeddedness on the relation among psychosocial safety climate and emotional labor.

**Firstly, answering the first research question about the level of job embeddedness among the staff nurses studied.**

The current findings indicated that more than half of the staff nurses perceived that the total level of job embeddedness was at moderate level. This could be because Benha University Hospital is a governmental hospital that offers nurses with effective financial, employment, insurance, and retirement rights, in addition to the hospital's location near their homes. All of these elements made

staff nurses more embedded in their professions.

Similarly, **El Sabahy, (2019)** found that almost fifty percent of the nurses studied showed an average degree of occupational embeddedness. **Goliroshan et al., (2021); Dechawatanapaisal, (2018)** discovered that nurses have a high degree of occupational embeddedness. In contrast to the current findings, **Mohamed and Obied, (2022)** study discovered that nurses had low levels of job embeddedness.

**Secondly, answering the research question on the level of psychological safety climate as perceived by the studied staff nurses.**

The current study findings indicated that there was moderate level of psychosocial safety climate Benha University Hospitals as perceived by the studied staff nurses. This could be attributable to Benha University Hospitals following The Ministry of Higher Education works with the Faculties of Nursing and Medicine to continuously improve their working conditions, and it has a Quality

Control Unit and a Safety Unit that have developed Organizational procedures, processes, and guidelines for ensuring employees' psychological safety and health. The current results are supported by **Dollard et al., (2017)** who found that nurses were content with their involvement in programs that preserve psychosocial health.

The current results are compatible with **Law et al., (2011)** who reported that there was increased degree of the PSC where the organization is concerned about psychological health of its team. On the other side, the results of the study of **Amiri et al., (2015)**, showed that the participants rated psychosocial safety climate at a low level.

#### **Addressing the third research question about the level of staff nurses' emotional labor as stated by them**

According to the recent study, over half of staff nurses involved in the study had moderate emotional labor. It could be because the majority of study subjects had 10-15 years of experience, which allows nurses to learn to control their emotions and adjust them to different situations.

Similarly, the results of **Costakis (2018)** study found that because emotional bonds meet basic human needs for belonging, improve mood and individual well-being, the study indicated that nurses preferred emotional labor. In addition, **Doğan and Sığrı, (2017)** observed that nursing personnel had a high emotional labor propensity due to their perception of themselves as angels in their vocation.

Furthermore, the results of this research showed that deep acting had a higher mean score than surface acting. This

outcome could be attributed to when nurses have pleasant relationships with others, they attempt to adjust their own feelings to the required performance originates from the heart. These findings are consistent with **Li, (2018)**, who discovered that performing emotional labor at work was a popular approach and that employees needed to express positive feelings. As a result, deep acting predominated over surface acting.

Although, **Spicer, (2022)** discovered that nursing staff prefers surface acting over deep acting because deep acting requires a greater effort to control their emotions and greater congruity between several modalities. Furthermore, the current study's findings contradict **Deng et al., (2017)** alongside **Xanthopoulou et al., (2018)**, who revealed that organizational display rules were positively associated to employees' surface acting rather than deep acting.

#### **Regarding the fourth research question about the correlations among overall ratings for emotional labor, psychosocial safety climate, and job embeddedness**

As stated by the results of the current research, firstly, all elements of job embeddedness and emotional labor were positively correlated in a very statistically significant way. This could be because embeddedness contains aspects that keep nurses attached to their hospital, emotionally devoted, and intend to stay, which motivates nurses to perform their best for the purpose of the hospital, and as a result, nurses learn to effectively regulate their emotions.

Moreover, **Eslamlou et al., (2021)** confirmed the results of the current study, revealing that emotionally resilient workers are those who have



healthy connections at work and are aware of the values they will lose if they leave their positions. As a result, resilient people are very well-integrated into their jobs. In the same vein, **Yao et al., (2019)** discovered strong positive relationships between job embeddedness and emotional labor.

Secondly, there is a favorable association between emotional labor and all aspects of the psychosocial safety climate that is extremely statistically significant.

This finding could be attributed to the hospital efforts to improve the workplace psychological safety environment as calm, comfortable, and harmonious working environment assists staff nurses in effectively managing their emotions and controlling their expressions in order to provide high-quality care. This finding is corroborated by **Abdi et al., (2023)**, who hypothesized that Enhancing employee well-being and reducing workplace stressors could be a "cause of causes" for a positive psychosocial safety climate.

Similarly, **Kinman and Leggetter, (2016)** found that psychological well-being and emotional labor had a strong positive correlation. Additionally, **Chen, (2023)** found that the psychosocial safety climate and emotional labor were positively correlated. However, **Lim, (2024)** found a negative correlation between psychosocial well-being and both forms of emotional labor.

Thirdly, highly statistically significant positive relation was found between job embeddedness and all aspects of the psychological safety climate. This finding can be interpreted as follows; Benha University Hospitals has a moderate level of psychosocial safety

climate, staff nurses feel more secure, comfortable, and attached to their jobs, and they never consider leaving. In the same vein, **Song et al., (2024)** demonstrated through their research that job embeddedness and psychosocial safety climate are significantly positively correlated.

### **Addressing the final research question concerning the mediating role of job embeddedness on the relation between psychosocial safety climate and emotional labor**

According to the current study findings, the relation between the psychosocial safety climate and emotional labor is mediated by job embeddedness. This could be due to workplace that has high psychosocial safety enables nurses to manage their emotions, increases nurses' satisfaction and encourages them to stay embedded in their job. Also, increasing organizational embeddedness can help reduce emotional weariness. Managers can incentivize employees to become more embedded by providing resources such are a compelling benefits package, relationships with coworkers in the company, and a high degree of congruence between current responsibilities and employees.

In the same line, previous research was carried out by **Zhou and Chen, (2021)** discovered that emotional exhaustion and psychosocial empowerment are mediated by organizational embeddedness. Additionally, **Mosaad et al., (2022)** highlighted the significance of job embeddedness as a source that nurses value and as a mediator nurses' commitment to their work will increase. Better adaptation to the work, more positive interactions with colleagues, more friends and deeper relationships

inside the organization are all made possible by nurses with a higher level of psychosocial safe climate.

### Conclusions

According to the present research results, we can conclude that there were highly significant positive correlations among total scores of emotional labor, job embeddedness and psychosocial safety climate. Moreover, job embeddedness had an indirect significant role partially mediated the relation between psychosocial safety climate and emotional labor.

### Recommendations

The following suggestions might be put into practice, according to the results of the current research:

- Organizations should provide specialized salary and benefits to encourage mutual incentives and support caregiver growth and development.
- Prioritizing caregiver development and training will improve the caliber of human resources and career management.
- Developing an effective staff development and mentoring programs especially for newly nurses based on providing and enhancing their ability to assess and manages own emotions.
- Creating of conductive psychosocial safety work climate through clear work expectations and open communication channels between nurses and all managerial levels.
- Maintaining alignment between hospital and nurses through strengthening one's sense of belonging to the group which increases retention and enhances nurses to embed in their jobs.

- Developing strategies to enrich nurses' embeddedness by offering them the chance to pursue careers at the hospital and include them in the decision-making process.

- Upcoming studies can utilize the current results as a guide to cultivate advanced search regarding nurses' emotional labor.

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### Conflict of interest

There was no conflict of interest.

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