

## **Emotional Labor and Its Related Factors in Clinical Nurses**

**Chia-Ming Liu<sup>1</sup>, Li-Min Chuang<sup>2</sup> and Su-Chiu Hsiao<sup>3\*</sup>**

### **Abstract**

The purpose of this study is to explore the emotional labor loading of nurses and its influencing factors. This study is a cross-sectional correlation study, in which convenience sampling is adopted and the subjects are clinical nurses serving in a medical center in Southern Taiwan. This study was conducted by census, in which a total of 750 questionnaires were issued, with the effective recovery rate 79.5%. The structured questionnaire was adopted, with the contents including personal basic data sheet and emotional labor loading scale. The obtained data were analyzed by t-test, one-way ANOVA, Scheffe's post-hoc test, and Pearson's product-moment correlation.

The results among clinical nurses in the study are as follows: i. The average score of emotional labor loading is 101.8 points (with total score 125 points and score range 50 to 125 points); and ii. in terms of influencing factors of emotional labor loading, service years are significantly correlated with the dimension of "overall emotional labor loading," and age, having children or not, marital status, service years, position, and service unit are significantly correlated with "basic emotional expression." Based on the results of the study, the researchers made relevant recommendations for nursing administrators and future research.

**JEL classification numbers:** C83, M15, O31.

**Keywords:** Clinical nurses, Emotional labor.

---

<sup>1</sup> Department of International Business, Chang Jung Christian University, Taiwan.

<sup>2</sup> Department of International Business, Chang Jung Christian University, Taiwan.

<sup>3\*</sup>Ph.D. Program in Business and Operations Management, Chang Jung Christian University, Taiwan.  
Director of Nursing Department of Chi Mei Hospital, Liouying. \*Corresponding author

## **1. Introduction**

According to [6] classification of emotional labor, nurses are professional, technical and high emotional labor loadings among similar workers. Nurses serve mainly patients. During the service process, nurses are often required to maintain a good attitude and mood. Although they can feel happy and relieved when the patient's health problems are resolved, most of them work with their family members facing the sadness of old age, illness and death, and their work mood is also greatly affected. However, they must cover up and suppress their emotions and provide professional services. Nurses can be described as a typical emotional labor worker [7]. It is worth noting that any emotion felt at work, after the worker leaves the workplace, often directly or indirectly affects their words, deeds and mental state symptoms [9]. The emotional labor of nurses is laborious but productive. In the process of nursing service, there is a gradual increase in emotional labor; therefore, it should be evaluated and valued just like the body or technology [1].

Proposed that from the perspective of organizational expectations, employees' compliance with organizational demands for emotional labor is valuable because these latent forces promote organizational efficiency [19]. From the above description and the turnover rate of nurses, it can be found that today's nurses do not reduce their workload due to technological progress, but their work pressure increases due to the postmodern focus on patients' individualized care needs and patients' rights. However, in traditional nursing education, only the cultivation of various professional techniques and skills is regarded, but the handling of emotional problems and the relief of self-emotional pressure of nurses is ignored. The increase in the proportion of depression among nurses may be related to work and emotional stress. Besides, the lack of proper channels to help nurses face stress, adjust to stress, and manage emotions will eventually evolve that nurses cannot exert the best nursing care effect but harm the rights and interests of patients. Therefore, the issue of nurses' stress and emotional labor loading is very important [12], and we will explore in depth in this study.

## **2. Research Method**

### **2.1 Research design**

This study is a cross-sectional correlational design, with the main purpose to understand the emotional labor loading of nurses and the correlation between the basic attributes and emotional labor loading of nurses. Data were collected by census sampling using structured questionnaires. A medical center in Southern Taiwan was the sampling site.

## **2.2 Research scope**

The subjects of this study are the clinical nurses of a medical center in Southern Taiwan, meeting the following criteria:

- 1) Those who must have a qualified nurse practitioner license.
- 2) Currently the official nurses of the receiving medical center.
- 3) Those who are not from other units to come to support.
- 4) Those who are willing to participate in the investigation of this research.

In this study,  $\alpha$  is set as 0.05, statistical power 0.8, and the correlation coefficient .15. It is estimated that the number of samples required for this study should be at least 349 [18]. This study was conducted by census method. A total of 750 questionnaires were sent out, with 551 recovered and the recovery rate 73%. There were 438 valid questionnaires, and the effective recovery rate was 79.5%.

## **2.3 Reliability and Validity Test**

### **2.3.1 Emotional labor loading scale**

The scale was modified with the Emotional Labor Loading Scale developed by [13], with a total of 25 items. The scale consists of five dimensions, namely “basic emotional expression” (questions 1-6), “superficial emotional control” (questions 7-10), “deep emotional disguise” (questions 11-16), “emotional diversity level” (questions 17-20), and “interaction level” (questions 21-25). In the Cronbach for each dimension of the scale, the  $\alpha$  values are “basic emotional expression” 0.91, “deep emotional disguise” 0.92, “superficial emotional control” 0.85, “emotional diversity level” 0.87, and “interaction level” 0.79. The number of questions in this research questionnaire is the same as that of the original scale. Due to the different characteristics of the industry, the semantics and expressions are modified to conform to the customary methods of the medical industry. Scored on a five-point Likert scale, all questions are positive questions, with 5-1 points for “always,” “often,” “occasionally,” “rarely,” and “never.” The higher the score, the higher the emotional loading of nurses.

### **2.3.2 Questionnaire for basic personal information**

This part is the basic information of the research object, including “age,” “gender,” “education level,” “marital status,” “service years,” “having children or not,” “service unit” and “position,” etc.

### **2.3.2 Data collation and analysis**

The data obtained from the study were used for descriptive statistics using SPSS 21.0 for Windows computer statistical software, and inferential statistics were carried out by independent sample t test, Pearson correlation and one-way ANOVA analysis of variance.

## 2.4 Rights and interests of subjects

Before the research was carried out, the rights and interests of the subjects had been reviewed by the Institutional Review Board (IRB), and the subjects have the right to refuse this research without affecting their work. The content of the questionnaire is coded, and the information obtained is only for academic research. The researcher will properly keep the relevant questionnaires to ensure the privacy of the respondents.

## 3. Results

### 3.1 Description of the demographic characteristics of nurses

There are 438 subjects in this study, with an average age 28.7 and the standard deviation 4.4; 241 (55%) are 26 to 30 years old, followed by 89 (20.3%) who are under 25 years old. There are 430 women (98.2%) the most, and 403 of them (92.0%) have a college degree or above. In terms of marital status, 326 (74.4%) are unmarried, and 345 (78.2%) have no children. The majority (341) work as nurses (77.8%). Most of the service units are in gynecology and pediatrics departments (22.8%), followed by the internal medicine department with 89 people (20.3%) and the surgical department with 83 patients (18.9%). The average length of service is 5.3 years, with the standard deviation 3.9; among them, 110 (25.1%) are in one to three years.

### 3.2 The current situation of emotional labor loading of nurses

The maximum total score of the research subjects is 125 points and the minimum score is 50 points, with the mean total score 101.8 points (SD=9.87), representing the overall emotional labor loading is on the high side. The mean of each dimension of the scale is between 4.34 and 3.77, with "interaction level" as the highest (M=4.34, SD=0.52), followed by "basic emotional expression," "superficial emotional control" and "deep emotional disguise," and the lowest "emotional diversity level" (M=3.77, SD=0.67). The top three items with the highest scores are "I need to meet many types of people at work" (4.55±0.58), "my job requires frequent direct face-to-face contact with people" (4.54±0.58), and "my time in contact with people at work is quite long" (4.50±0.61). The lowest score is "when I work, I have to make different emotional reactions according to the background differences between patients and their families" (3.51±1.00). According to the scores of each dimension, the highest score in the dimension of "basic emotional expression" is "I need to keep a friendly attitude when talking with patients and family members" (4.28±0.55). The highest score in the "superficial emotional control" dimension is "I must maintain an appropriate tone of voice at work to maintain a professional image of nursing" (4.06±0.61). The highest score in the dimension of "deep emotional disguise" is "when facing with complaints from patients and family members, I have to work hard to restrain my unhappiness" (4.08±0.64). The highest score in the dimension of "emotional diversity level" is "at work, I have to respond differently according to the needs of patients and their families" (4.05±0.63). The highest score in the "interaction level" dimension is "I

need to meet many types of people at work” (4.55±0.58), which is consistent with [14] findings, representing that nurses experience stress and emotional labor in a variety of settings, but that these experiences may improve their emotional intelligence. More specifically, the main predictor of emotional labor is the perception of display rules, dictating which emotions should be expressed or hidden [3]. Demonstration rules provide a standard for emotional expression based on a given job, emphasizing observed emotion (superficial behavior) rather than actual emotion (deep behavior) based on their necessity for efficient job performance [2][3]. Emotional workers, such as nurses who have strong emotional contact with their subjects, experience stricter display rules and therefore generate more emotional labor. While both superficial performance and deep performance conform to the rules of emotional display, superficial performance is subject to the rules of display [6]. (See Table 1)

**Table 1: Nurses’ emotional labor loading scores (N=438)**

<b>Dimension/Question</b>	<b>Mean</b>	<b>Standard deviation</b>
<b>“Basic Emotional Expression”</b>	4.17	.50
When in contact with patients and their family members, I always take the initiative to greet patients, making patients and their families feel respected.	4.22	.64
I need to keep a friendly attitude when talking with patients and family members.	4.28	.55
When facing patients and their families, I always keep a friendly smile on my face.	4.17	.63
I always make patients and their families feel cared.	4.09	.61
When working, I have to show kindness to close the distance with patients and their families.	4.20	.59
I have to show enthusiasm at work, making patients and their families have a good impression on me.	4.08	.63
<b>“Superficial Emotion Control”</b>	4.02	.54
I need to patiently listen to the complaints of patients and their families to resolve their dissatisfaction.	4.05	.65
I need to work hard to maintain a happy mood to create a warm atmosphere in the workplace.	4.02	.69
When working, I have to show a certain behavior or facial expression to convey the image of being a nurse.	3.98	.71
I must maintain an appropriate tone of voice at work to maintain a professional image of nursing	4.06	.61
<b>“Deep Emotional Disguise”</b>	3.97	.55
When facing with complaints from patients and family members, I have to work hard to restrain my unhappiness.	4.08	.64
When I face patients and family members I don't like, I try to hide my likes and dislikes	4.03	.69

When patients and their families have unreasonable requests, I should still be kind.	3.92	.69
When I feel dissatisfied with patients and their families, I try to hold back my anger.	4.03	.71
At work, even though I am tired, I must try my best to maintain a proper mood.	4.03	.64
When I am treated unkindly by my colleagues, I must try my best to suppress the unhappiness in my heart and not show it.	3.74	.76
<b>“Emotional Diversity Level”</b>	3.77	.67
At work, I have to respond differently according to the needs of patients and their families.	4.05	.63
In the face of different patients and their families, I have to show different emotions.	3.79	.80
I respond differently to different patients and families	3.74	.85
When I work, I have to make different emotional reactions according to the background differences between patients and their families.	3.51	1.00
<b>“Interaction Level”</b>	4.34	.52
My job requires frequent direct face-to-face contact with.	4.54	.58
My job requires frequent communication with people by voice	4.47	.65
My time in contact with people at work is quite long.	4.50	.61
I need to meet many types of people at work	4.55	.58
When I am off work, I must also keep in touch with the workplace if necessary	3.68	.97
<b>“Overall Emotional Labor Loading”</b>	101.8	9.87

### 3.3 Demographic characteristics of nurses and the difference analysis of various variables

#### 3.3.1 Gender

Based on the relationship between gender and the emotional labor loading of nurses, a t test is performed to analyze the differences.

**Table 2: Differences between gender and emotional labor loading of nurses (N=438)**

Dimension	Gender	Mean	Standard deviation	t	P
“Basic emotional expression”	Male	4.41	.41	1.66	.164
	Female	4.16	.50		
“Superficial emotional control”	Male	4.18	.39	1.14	.401
	Female	4.02	.54		
“Deep Emotional Disguise”	Male	3.66	.76	-1.14	.116
	Female	3.97	.54		
“Emotional diversity level”	Male	3.71	.71	-.21	.820
	Female	3.77	.67		
“Interaction level”	Male	4.15	.29	-1.88	.274
	Female	4.35	.52		
“Overall emotional labor loading”	Male	4.03	.37	-.28	.788
	Female	4.07	.39		

Note:  $p < .05$

Note: Male=8, Female=430

Table 2 shows in the results of the t-test, the mean differences between the five dimensions, namely “basic emotional expression,” “superficial emotional control,” “deep emotional disguise,” “emotional diversity level” and “interaction level,” and “overall emotional labor loading” do not reach the .05 significant level, that is, there is no significant difference in male and female nurses between the five dimensions, “basic emotional expression,” “superficial emotional control,” “deep emotional disguise,” “emotional diversity level,” and “interaction level,” and “overall emotional labor loading.”

#### 3.3.2 Age and emotional labor loading of nurses

The relationship between age and emotional labor loading of nurses is analyzed by one-way ANOVA.

**Table 3: Differences in age and emotional labor loading of nurses (N=438)**

Dimension	Age group	Average	Standard deviation	F	p	Post Hoc
“Basic emotional expression”	<= 25 years old	4.14	.36	3.88	.009	
	26~30 years old	4.12	.53			
	31~35 years old	4.25	.52			
	36 (inclusive) or above	4.48	.50			
“Superficial emotional control”	<= 25 years old	3.91	.45	6.35	<.001	36 (inclusive) or above > 26~30 years old
	26~30 years old	4.12	.55			
	31~35 years old	4.17	.52			
	36 (inclusive) or above	4.55	.48			
“Deep emotional disguise”	<= 25 years old	3.88	.46	1.18	.316	
	26~30 years old	3.99	.56			
	31~35 years old	3.95	.57			
	36 (inclusive) or above	4.27	.49			
“Emotional diversity level”	<= 25 years old	3.74	.57	3.65	.013	
	26~30 years old	3.81	.64			
	31~35 years old	3.78	.68			
	36 (inclusive) or above	3.48	1.15			
“Interaction level”	<= 25 years old	4.29	.49	2.05	.106	
	26~30 years old	4.32	.56			
	31~35 years old	4.46	.42			
	36 (inclusive) or above	4.48	.39			
“Overall emotional labor loading”	<= 25 years old	4.01	.30	1.88	.132	
	26~30 years old	4.06	.42			
	31~35 years old	4.13	.36			
	36 (inclusive) or above	4.28	.48			

Note:  $p < .001$

Note: <= 25 years old = 89, 26~30 years old = 241, 31~35 years old = 86, and 36 (inclusive) or above = 22.

Table 3 shows that “deep emotional control,” “emotional diversity level,” “interaction level,” and “overall emotional labor loading” of nurses of different age groups do not differ significantly by age. However, there is significant differences in the dimensions of “basic emotional expression” and “superficial emotional disguise” ( $p < .001$ ). In Scheffe’s post-hoc test comparison, it is found that in the dimension of “superficial emotional disguise,” the emotional labor loading of the age group over 36 years old (inclusive) is greater than that of the age group greater than 26 to 30 years old.



### 3.3.3 Differences between service years and emotional labor loading of nurses

One-way ANOVA is used to analyze the relationship between service years and emotional labor loading of nurses. (Table 4)

**Table 4: Differences between service years and emotional labor loading of nurses (N=438)**

Dimension	Service years	Average	Standard deviation	F	p	Post Hoc
“Basic emotional expression”	1 year or less	4.09	.38	4.15	.003	10+years > 3~5 years
	1~3 years	4.14	.49			
	3~5 years	4.05	.54			
	5~10 years	4.23	.50			
	10+ years	4.32	.47			
“Superficial emotional control”	1 year or less	3.78	.49	7.42	< .01	10+years > 1 year or less
	1~3 years	4.02	.51			
	3~5 years	3.92	.54			
	5~10 years	4.09	.53			
	10+ years	4.24	.52			
“Deep emotional disguise”	1 year or less	3.79	.45	1.98	.096	
	1~3 years	3.99	.52			
	3~5 years	3.92	.57			
	5~10 years	4.04	.58			
	10+ years	4.01	.55			
“Emotional diversity level”	1 year or less	3.71	.49	1.50	.199	
	1~3 years	3.82	.57			
	3~5 years	3.85	.61			
	5~10 years	3.76	.77			
	10+ years	3.63	.82			
“Interaction level”	1 year or less	4.15	.47	4.38	.002	No significance
	1~3 years	4.27	.55			
	3~5 years	4.33	.53			
	5~10 years	4.45	.53			
	10+ years	4.46	.42			
“Overall emotional labor loading”	1 year or less	3.92	.30	3.59	.007	No significance
	1~3 years	4.06	.38			
	3~5 years	4.02	.42			
	5~10 years	4.13	.40			
	10+ years	4.15	.37			

Note:  $p < .01$

Note: Less than 1 year = 49, 1~3 years = 110, 3~5 years = 103, 5~10 years = 93, more than 10 years = 83.

Table 4 shows that in each dimension, it is found that there is no significant difference in terms of “deep emotional disguise” and “emotional diversity level” among nurses with different service years. However, in the four dimensions of “basic emotional expression,” “superficial emotional control,” “interaction level” and “overall emotional labor loading,” by the F test analysis, it is found that the difference in the averages reached a significant level of .01. Therefore, it is inferred that clinical nurses with different service years have significant differences in the four dimensions of emotional labor: “basic emotional expression,” “superficial emotional control,” “interaction level,” and “overall emotional labor loading.” In Scheffe’s post-hoc test comparison, it is found that the emotional labor loading of “basic emotional expression” of the nurses with more than ten service years is greater than that with 3-5 service years.

### 3.3.4 Differences between marital status and emotional labor loading of nurses

Based on the relationship between marital status and the emotional labor loading of nurses, a t-test is used to analyze the differences.

**Table 5: Marital status and emotional labor loading of nurses (N=438)**

Dimension	Marital status	Mean	Standard deviation	t	P
“Basic emotional expression”	Unmarried	4.12	.49	-3.02	.003
	Married	4.29	.51		
“Superficial emotional control”	Unmarried	3.96	.53	-3.95	< .01
	Married	4.20	.53		
“Deep emotional disguise”	Unmarried	3.96	.54	-.46	.643
	Married	3.99	.57		
“Emotional diversity level”	Unmarried	3.78	.64	.29	.765
	Married	3.75	.76		
“Interaction level”	Unmarried	4.31	.53	-2.72	.007
	Married	4.46	.47		
“Overall emotional labor loading”	Unmarried	4.04	.39	-2.51	.013
	Married	4.15	.40		

Note:  $p < .01$

Note: Unmarried = 328, married = 110.

Table 5 shows that there is no significant difference in “deep emotional disguise,” “emotional diversity level,” and “overall emotional labor loading” among the nurses with different marital status. However, in terms of “basic emotional expression,” “superficial emotional control,” and “interaction level” dimensions, in the t-test analysis, it is found that there are significant differences that married clinical nurses have higher mean scores than unmarried ones.

### 3.3.5 Differences in emotional labor loading among nurses having children or not

The relationship between the presence of children and the emotional labor loading of nurses is analyzed by t-test.

**Table 6: Emotional labor loading of nurses having children or not (N=438)**

Dimension	Having children or not	Mean	Standard deviation	t	P
“Basic emotional expression”	Yes	4.29	.50	2.69	.007
	No	4.13	.49		
“Superficial emotional control”	Yes	4.20	.54	3.58	<.001
	No	3.98	.53		
"Deep emotional disguise”	Yes	4.00	.57	.75	.452
	No	3.96	.54		
“Emotional diversity level”	Yes	3.74	.78	-.40	.683
	No	3.77	.64		
“Interaction level”	Yes	4.47	.46	2.63	.009
	No	4.31	.53		
“Overall Emotional Labor Loading”	Yes	4.16	.39	2.43	.015
	No	4.04	.39		

Note:  $p < .01$

Note: Having children = 93 and having no children = 345.

Table 6 shows that in each dimension, clinical nurses having children or not have no significant differences in the “emotional diversity level,” “deep emotional disguise,” and “overall emotional labor loading.” However, in terms of “basic emotional expression,” “superficial emotional control,” and “interaction level” dimensions, in the t-test analysis, it is found that there are significant differences and the scores of those with children are higher than those without children.

### 3.3.6 Differences between the educational level and the emotional labor loading of nurses

Regarding the relationship between education level and the emotional labor loading of clinical nurses, a t-test is used to analyze the differences.

**Table 7: Education level and emotional labor loading of nurses (N=438)**

<b>Dimension</b>	<b>Education level</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t</b>	<b>p</b>
“Basic emotional expression”	College	4.26	.45	1.10	.270
	University (inclusive) or above	4.15	.50		
“Superficial emotional control”	College	4.14	.55	1.30	.191
	University (inclusive) or above	4.01	.53		
“Deep emotional disguise”	College	4.10	.63	1.50	.134
	University (inclusive) or above	3.95	.53		
“Emotional diversity level”	College	3.75	.87	-.20	.835
	University (inclusive) or above	3.77	.65		
“Interaction level”	College	4.38	.54	.39	.696
	University (inclusive) or above	4.33	.51		
“Overall Emotional Labor Loading”	College	4.14	.44	1.17	.241
	University (inclusive) or above	4.06	.38		

Note:  $p < .05$

Note: College = 35 and university (inclusive) and above = 403.

Table 7 shows that nurses with different educational levels do not have significant differences in six dimensions of emotional labor: “basic emotional expression,” “superficial emotional control,” “deep emotional disguise,” “emotional diversity level,” “interaction level,” and “overall emotional labor loading.”

### **3.3.7 Position and emotional labor loading of clinical nurses**

One-way ANOVA is used to analyze the relationship between holding positions and emotional labor loading of nurses. (Table 8)

**Table 8: Differences in emotional labor loadings between positions and nurses (N=438)**

Dimension	Job group	Mean	Standard deviation	F	p	Post Hoc
“Basic emotional expression”	Nurse	4.13	.50	2.91	.021	
	Group leader	4.22	.49			
	Senior nurse	4.34	.51			
	(Deputy) head nurse	4.41	.41			
“Superficial emotional control”	Nurse	3.99	.53	3.81	.005	(Deputy) head nurse > Nurse
	Group leader	4.02	.58			
	Senior nurse	4.12	.58			
	(Deputy) head nurse	4.38	.41			
“Deep emotional disguise”	Nurse	3.97	.56	1.00	.406	
	Group leader	3.98	.50			
	Senior nurse	3.73	.54			
	(Deputy) head nurse	4.08	.47			
“Emotional diversity level”	Nurse	3.79	.66	1.70	.149	
	Group leader	3.81	.68			
	Senior nurse	3.35	.77			
	(Deputy) head nurse	3.75	.66			
“Interaction level”	Nurse	4.31	.51	4.17	.002	No significance
	Group leader	4.42	.51			
	Senior nurse	4.42	.46			
	(Deputy) head nurse	4.64	.36			
“Overall emotional labor loading”	Nurse	4.05	.40	2.54	.039	
	Group leader	4.11	.32			
	Senior nurse	4.02	.30			
	(Deputy) head nurse	4.27	.28			

Note:  $p < .01$

Note: Nurses = 341, group leaders = 53, senior nurses = 14, and (deputy) head nurses = 30.

Table 8 shows it is found that nurses who hold different positions have no difference in the dimensions of “basic emotional expression,” “deep emotional disguise,” “emotional diversity level,” and “overall emotional labor loading.” However, in terms of “superficial emotional control” and “interaction level,” by the F test analysis, it is found that the average difference reaches a significant level of .01.

Therefore, it is inferred that there are significant differences in the dimensions of “superficial emotional control” and “interaction level” among nurses with different positions. In Scheffe’s post-hoc test comparison, it is found that the emotional labor loading of the (deputy) head nurses in the “superficial emotional control” dimension is greater than that of general nurses.

### 3.3.8 Emotional labor loading and services units of nurses

One-way ANOVA is used to analyze the relationship between service units and nurses’ emotional labor loading.

**Table 9: Differences of nurses in different service units in emotional labor loading (N=438)**

Dimension	Group	Mean	Standard deviation	F	p	Post Hoc
“Basic emotional expression”	Emergency	3.92	.46	3.47	.002	Gynecology and pediatrics departments > Emergency
	Outpatient clinic	4.15	.56			
	Internal medicine department	4.18	.52			
	Surgical department	4.14	.42			
	Intensive care unit	4.12	.53			
	Gynecology and pediatrics departments	4.31	.46			
“Superficial emotional control”	Emergency	3.88	.53	2.25	.038	
	Outpatient clinic	4.16	.57			
	Internal medicine department	3.95	.56			
	Surgical department	3.97	.50			
	Intensive care unit	4.00	.58			
	Gynecology and pediatrics departments	4.15	.46			
“Deep emotional disguise”	Emergency	3.93	.47	1.00	.425	
	Outpatient clinic	4.02	.62			
	Internal medicine department	4.01	.61			
	Surgical department	3.88	.47			
	Intensive care unit	3.92	.56			
	Gynecology and pediatrics departments	4.04	.52			

“Emotional diversity level”	Emergency	3.76	.68	2.65	.016	
	Outpatient clinic	3.54	.83			
	Internal medicine department	3.85	.59			
	Surgical department	3.76	.54			
	Intensive care unit	3.76	.67			
	Gynecology and pediatrics departments	3.85	.73			
“Interaction level”	Emergency	4.52	.38	1.94	.072	
	Outpatient clinic	4.41	.41			
	Internal medicine department	4.42	.52			
	Surgical department	4.29	.50			
	Intensive care unit	4.26	.60			
	Gynecology and pediatrics departments	4.30	.52			
“Overall Emotional Labor Loading”	Emergency	4.01	.32	1.36	.228	
	Outpatient clinic	4.08	.44			
	Internal medicine department	4.10	.43			
	Surgical department	4.02	.33			
	Intensive care unit	4.03	.42			
	Gynecology and pediatrics departments	4.14	.37			

Note:  $p < .01$

Note: Emergency = 41, Outpatient clinic = 43, Internal medicine department = 89, Surgical department = 83, Intensive Care Unit = 82, Gynecology and Pediatrics departments = 100.

In Table 9, it is found that there are no significant differences among the nurses of different service units in the dimensions of “superficial emotional control,” “deep emotional disguise,” “interaction level,” “emotional diversity level,” and “overall emotional labor loading.” However, in the dimension of “basic emotional expression,” by the F test analysis, it is found that the mean difference reaches a significant level of .01. Therefore, it is inferred that there are significant differences in the “basic emotional expression” dimension of emotional labor among nurses in different service units. In Scheffe’s post-hoc test comparison, it is found that the emotional labor loading of “basic emotional expression” for nurses serving in gynecology and pediatrics is higher than that of nurses serving in emergency department.

## 4. Conclusion and Suggestion

### 4.1 Research findings and conclusions

The research hypotheses and empirical analysis results are summarized as follows:

#### 4.1.1 The current situation of emotional labor loading of clinical nurses

The emotional labor loading of clinical nurses is relatively high.

#### 4.1.2 Differences in emotional labor loading among nurses with different background variables

1. *Gender*: In various dimensions of emotional labor loading of nurses, there is no significant difference between women and men.
2. *Age*: In the dimension of “superficial emotional control,” nurses in the age group over 36 years old are larger than those in the age group 26-30 years old.
3. *Marital status*: In terms of emotional labor loadings of “basic emotional expression,” “superficial emotional control,” “interaction level,” and “overall emotional labor loading,” the scores of married nurses are higher than those of unmarried nurses.
4. *Having children or not*: The scores of nurses with children are higher than those without children in terms of emotional labor loading of “basic emotional expression,” “superficial emotional control,” and “interaction level.”
5. *Educational level*: There is no significant difference in the overall and each dimension of emotional labor loading of nurses due to different educational levels.
6. *Service years*: In the dimension of “basic emotional expression,” the scores of the nurses with more than 10 service years are higher than those with 3-5 service years. In the dimension of “superficial emotional control,” the scores of the nurses with more than 10 service years are higher than those with less than 1 year of service (inclusive).
7. *Position*: In the dimension of “superficial emotional control,” the scores of the (deputy) head nurses are higher than those of general nurses.
8. *Service unit*: In the dimension of emotional labor loading of “basic emotional expression” of clinical nurses, the nurses serving gynecology and pediatrics units are higher than emergency nurses.

### 4.2 Research Conclusions

1. The clinical nurses of the medical center are high-emotion labor workers; especially the dimension of “interaction level” is the highest. In order to play their job role well, the nurses show a suitable emotional state, meet the needs of hospital policies and care quality, and maintain emotional stability, which is an affirmation of the nurses. However, under the condition of long-term high emotional labor loading, whether there will be physical and mental reactions such as emotional dysregulation or emotional exhaustion is something that nurses should be cautious and pay attention to [1].



2. There are significant differences in emotional labor loading among the different demographic variables of nurses in this medical center. Older nurses with longer seniority, married with children, and in charge in the service unit have higher emotional labor loading, representing that the clinical nurses with socialization and time experience can better control their emotions, provide appropriate behaviors, and improve their emotional abilities. In addition to understanding the emotional labor loading of nurses, hospital administrative units and nurses should pay more attention to this emotional labor loading and actively seek solutions to avoid emotional disorders and physical and mental imbalances [2][3].

### 4.3 Suggestion

Recommendations for nursing care from the results of this study are stated as follows:

#### 4.3.1 Nursing practice

1. *Establishing selection criteria and selecting appropriate nurses*

From the research results, there are significant differences between the demographic characteristics and emotional labor loading. It is suggested that the administrator can analyze the attributes, patient characteristics and needs of each department and unit, and then formulate the emotional characteristics of the nurses in each department and unit [17]. In addition, in order to know whether the candidate has good emotional perception ability, the emotional intelligence test published in the market can be referred, which includes an individual's assessment of one's ability to perceive one's own emotions. Designing selection tool. When selecting clinical nurses, the interview or written test can be used to indirectly predict whether the candidate has a high level of recognition and commitment to the organization to which they belong, and whether they have better emotional awareness. It may be possible to arrange personnel with different emotional characteristics in suitable units, so that clinical nurses can have good physical and mental health and well-being, and it is not easy to leave due to job burnout, emotional stress and other factors, resulting in an increase in personnel costs.

2. *Training service personnel on emotional management skills*

In the results of this study, it is found that the performance of emotional labor by employees does not necessarily bring negative effects to the organization or individuals but may also have positive effects. Nurses bear a moderate emotional labor loading, which can promote self-motivation and job satisfaction of nurses. However, the emotional imbalance caused by excessive emotional loading also does cause job dissatisfaction [15]. During the recruitment process, the organization should take the initiative to inform the ability and conditions required for the work, the work tasks, or the emotional state that should be expressed in the work, which can provide more channels for emotional catharsis or stress management training and the organization positive results [8][16][11].

In the results of this study, "interaction level" is the highest score of emotional labor

loading, in which the three items “I need to meet many types of people at work,” “my job requires frequent direct face-to-face contact with,” “my time in contact with people at work is quite long” are the most, which are unavoidable attributes of clinical nursing work, however. Therefore, it is necessary to train nurses on how to effectively deal with patients or families. In addition, while training skills, personnel can also be trained how to carry out emotional management in a deep disguise manner. For example, taking deep breaths, temporarily leaving the scene where the emotion is triggered, etc. to ease emotions, or teaching cognitive reconstruction methods to allow employees to perform deep disguised emotional labor. In addition, trainers must make the front-line nurses fully identify and invest in their role in order to effectively promote the emotional labor of deep disguise [2][3].

3. *Establishing a pressure relief mechanism*

Nurse growth groups can be established to meet regularly in small groups, so that nurses can share each other's experiences and support and encourage each other. Appropriately scheduled vacations or organize tourism activities can be given, so that employees can relax, relieve the pressure of work, adjust their body and mind, and improve work efficiency [8][10].

#### 4.3.2 Nursing Research

1. *Re-validation of the reproduction study*

This study shows that although clinical nurses have a high emotional labor loading, the emotional labor loading scale with nurses as the research object has not yet been developed domestically. It is expected to re-examine it with a remake study. If the results are consistent, the degree of emotional labor loading of nurses at home and abroad can be confirmed.

2. *Expanding research objects*

Limited by research time, funding, and ability, the subjects of this study are limited to clinical nurses in a medical center in Tainan. Although foreign studies have confirmed that nurses are high emotional labor loading workers, whether there will be different research results due to different service objects and cultural differences is still unknown. Therefore, in the future, in terms of research objects, the horizontal dimension can be extended to the public and private regions and the whole Taiwan regions, and the vertical dimension can be extended to regional hospitals and medical centers. In addition, the subjects of this study did not include the director and supervisor of the nursing department. However, nursing supervisors are the soul of the hospital, and it is worth exploring whether there is also high emotional labor loading.

3. *Adding research variables*

According to [4] framework of emotional labor loading, emotional labor loading affects “personal well-being,” job burnout, and job satisfaction. In addition, emotional labor loading can also affect “organizational well-being,” including withdrawal behavior and performance status. These dimensions have been

discussed in foreign papers one after another [5]. However, no one has explored it in the nursing field in Taiwan, but its impact should be paid attention to. It is suggested that future researchers can continue to explore other dimensions of emotional labor.

4. *Research methods with equal emphasis on quality and quantity*

In this study, a quantitative method is used for verification by means of a questionnaire survey. Although the common views of most people can be found, the emotional part involves inner emotions, so it is less possible to explore the inner part in a quantitative way. If future research can strengthen the qualitative part, whether it is “quantity before quality” or “quality before quantity,” it should be able to find some blind spots in the research, which will be more helpful to the research.

5. *Discussing the mediating factors that affect emotional labor*

Many studies have confirmed the fact that emotional labor loading exists. However, what kind of impact it will cause, there is no consistent research result so far. Whether it is due to the interference of intermediary variables, such as self-monitoring, emotional intelligence, cultural factors, perceived organizational support, and work autonomy, if the intermediary variables can be identified, the issue of emotional labor loading can be discussed in more depth as key points for future research.

## References

- [1] Brotheridge, C.M., & Grandey, A.A. (2002). Emotional labor and burnout: Comparing two perspectives of “People Work”. *Journal of Vocational Behavior*, 60, 17-39.
- [2] Diefendorff, J.M., & Gosserand, R.H. (2003). Understanding the emotional labor process: A control theory perspective. *Journal of Organizational Behavior*, 24(8), 945-959. <https://doi.org/10.1002/job.230>
- [3] Goldberg, L.S., & Grandey, A.A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12(3), 301-318. <https://doi.org/10.1037/1076-8998.12.3.301>
- [4] Grandey, A.A. (2000). Emotional regulation in the workplace: A new way to conceptualize emotional labor. *Journal of Occupational Health Psychology*, 5(1), 95-110.
- [5] Gosserand, R. H. (2003). An examination of individual and organizational factors related to emotional labor. Unpublished doctoral dissertation. Louisiana State University.
- [6] Hochschild, A.R. (1983). *The managed heart*, Berkeley: University of California Press.
- [7] Han, S.G. (2016). A study on the occupational characteristics of emotional labor in Korea. *Labor Research*, 32, 5-27.
- [8] Hwang, W.J., Yang, H.K., & Kim, J.H. (2020). What Are the Experiences of Emotional Labor and Workplace Violence that Are More Harmful to Health in

- Korean Workforce? *International Journal of Environmental and Health Research*, 17(21), 8019. <https://doi.org/10.3390/ijerph17218019>
- [9] Kim, S.H., & Ham, Y. (2015). A meta-analysis of the variables related to the emotional labor of nurses. *Journal of Korean Academy of Nursing Administration*, 21(3), 263-276. <https://doi.org/10.1111/jkana.2015.21.3.263>.
- [10] Kim, M.J., Kim, S.J., & Kim, K.B. (2013). Phenomenological approach on self-esteem of clinical nurses. *Journal of East-West Nursing Research*, 19(2), 138-149. <https://doi.org/10.14370/jewnr.2013.19.2.138>
- [11] Kim, J. H., Lee, Y.M., Joung, H.Y., Choo, H.S., Won, S.J., Kwon, S.Y., & Jang, H.J. (2013). Effects of emotional labor, emotional intelligence and social support on job stress in clinical nurses. *Journal of Korean Academy of Fundamentals of Nursing*, 20(2), 157-167. <https://doi.org/10.7739/jkafn.2013.20.2.157>
- [12] Kim, H.J., & Yom, Y.H. (2014). Structural equation modeling on burnout in clinical nurses based on CS-CF model. *Journal of Korean Academy of Nursing*, 44(3), 259-269. <https://doi.org/10.4040/jkan.2014.44.3.259>
- [13] Lin, Shang-ping(2000):A Study of the Development of Emotional Labor Loading Scale. *Sun Yat-Sen Management Review*, 8(3), 427-447 °
- [14] Mann, S., & Cowburn, J. (2005). Emotional labour and stress within mental health nursing. *Journal of Psychiatric and Mental Health Nursing*, 12(2), 154-162. <https://doi.org/10.1111/j.1365-2850.2004.00807.x>
- [15] Morris, J.A., & Feldman, D.C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, 21(4), 986-1010. <https://doi.org/10.5465/amr.1996.9704071861>
- [16] Schmidt, K.H., & Diestel, S. (2014). Are emotional labour strategies by nurses associated with psychological costs? A cross-sectional survey. *International Journal of Nursing Studies*, 51(11), 1450-1461. <https://doi.org/10.1016/j.ijnurstu.2014.03.003>
- [17] Smith, P., & Gray, B. (2001). Reassessing the concept of emotional labour in student nurse education: Role of link lecturers and mentors in a time of change. *Nurse Education Today*, 21(3), 230-237. <https://doi.org/10.1054/nedt.2001.0541>
- [18] Yu, J.P. (2012). Concepts and understanding of structural equation model (1st ed.). Seoul: Hannarae.
- [19] Zeng, Y., Chen, X., & Chen, Y. (2014). Impact of emotional intelligence on emotional labor strategy: The mediating effects of general self-efficacy and organizational identification. In *Proceedings of the International Conference on Computer Science and Service System (CSSS 2014)*, 207-210.