

# The Effects of Emotional Labor and Anger Expression on Psychological Well-Being among Psychiatric Nurses

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**Abstract:** This is a descriptive survey study designed to identify psychiatric nurses' the influencing factors of emotional labor and anger expression on psychological well-being. The study subjects were 260 nurses. As a result, the scores of the psychiatric nurses' emotional labor, anger expression, and psychological well-being were 3.06, 23.04, and 3.41 points, respectively. Psychological well-being was revealed to have a significant negative correlation with emotional labor ( $r=-.25$ ,  $p<.001$ ) and anger expression ( $r=-.34$ ,  $p<.001$ ). The variable which had the greatest effect on psychological well-being was anger-in ( $\beta=-.29$ ,  $p<.001$ ) as a sub-factor of anger expression. Factors influencing psychological well-being were anger suppression during anger expression ( $\beta=-.30$ ,  $p<.001$ ), anger control ( $\beta=.20$ ,  $p<.001$ ), and emotional dissonance during emotional labor ( $\beta=-.16$ ,  $p=.001$ ). The total explanatory power and the modified explanatory power of the factors found to affect psychological well-being are 27.0% and 25%, respectively ( $F=15.33$ ,  $p<.001$ ).

**Keywords:** emotional labor, anger expression, psychological well-being, psychiatric nurses

## 1. Introduction

### 1.1. Background

With the rapidly changing social environments, the medical world has also seen gradually increasing demands for evaluation systems for medical institution certification, etc. and a variety of patient-centered health care services and the medical services perceived by medical care recipients may have a decisive effect on the quality of hospital services [1,2]. Hospitals constantly and consistently provide nurses with training courses for friendly responses and assess whether or not they use appropriate emotional expressions and comply with the required codes of conduct. As hospitals try to even manage and control the feelings of nurses, the nursing staff sometimes feels uncomfortable in the face of various regulations during clinical practice [3-6]. When it comes to 'the emotional labor experience of clinical nurses,' 97.9% of clinical nurses experienced emotional labor [4,5]. In particular, psychiatric nurses, who are required to adapt to their hospital's closed and hierarchical organizational culture and engage in their work in special environments where they have to develop and control their internal resources, tend to experience more serious emotional labor than other medical care staff because they are required to use themselves as a therapeutic tool [7-9]. Also, they are exposed to more various stressful experiences, eventually imposing a threat to their psychological well-being [3,4,9]. Emotional labor and inappropriate anger expression, which are factors presumed to be associated with psychiatric nurses' psychological well-being, were found to be associated with their psychological well-being through previous studies [8-10]. However, few studies consider psychiatric nurses' emotional labor and anger expression modes with psychological well-being. Therefore, this study is intended to provide baseline data for improvements in the working conditions of psychiatric nurses and the development of nursing care services, by identifying the levels of emotional labor, anger expression, and psychological well-being among nurses working

at psychiatric hospitals nationwide and by examining the effects of emotional labor and anger expression on psychological well-being.

### **1.2. Purpose**

This study is aimed at identifying the levels of emotional labor, anger expression, and psychological well-being among psychiatric nurses and determining the effects of emotional labor and anger expression on psychological well-being. The specific objectives are as follows:

- A. Identifying the levels of the subjects' emotional labor, anger expression, and psychological well-being.
- B. Identifying correlations among the subjects' emotional labor, anger expression, and psychological well-being.
- C. Identifying the factors affecting the subjects' psychological well-being.

## **2. Method**

### **2.1. Design**

This is a descriptive survey study designed to investigate the effects of emotional labor and anger expression on the psychological well-being of psychiatric nurses.

### **2.2. Subject**

Nurses who worked for 6 months or more at 16 psychiatric hospitals nationwide were selected as the subjects of this study, using convenience sampling. For the sample size, the effect size for regression analysis, the significance level of two-sided tests, and the power of a test were set as .15, .05, and .95, respectively, using the G\*Power 3.1.3 program that calculates sample size according to Cohen's formula. As a result of calculating the sample size with a total of 19 predictor variables (emotional labor, anger expression, and 17 general characteristics), the target sample size was estimated at 217. Thus, a total of 260 subjects were selected considering the dropout rate of 20%. After a questionnaire was distributed to each subject, all 260 copies were collected. Of these, a total of 255 copies, except 5 copies with non-responses or overlapping and inadequate answers, were used as the final analysis set.

### **2.3. Research Tools**

#### **2.3.1. Emotional Labor**

This study used the emotional labor tool, which was developed by Morris and Feldman [11] and modified and supplemented by Kim Min-joo [12], after receiving approval via e-mail. This tool consists of the frequency of emotional labor (3 questions), attentiveness of emotional display (3 questions), and mismatch of emotions (3 questions). Scores were measured on a scale of 1 ('Strongly disagree') to 5 points ('Strongly agree') using the 5-point Likert scale. The total scores ranged from 9 to 45 points, and the higher the score, the higher the intensity of emotional labor. The reliability of the tool was Cronbach's  $\alpha = .86$  in the study by Kim Min-joo [12] and Cronbach's  $\alpha = .84$  in this study.

#### **2.3.2. Anger Expression**

To calculate the scores of anger expression, the Korean version of the State-Trait Anger Expression Inventory (STAXI) developed by Spielberger [13] and then modified and standardized by Chon Kyum-koo et al. [14] was used after being approved via e-mail. The Korean version of STAXI (STAXI-K) consists of trait anger (10 questions), state anger (10 questions), and anger expression (24 questions). Only the 24 questions of anger expression were used in this study, along with its 3 sub-factors: anger-in, anger-out, and anger control (8 questions, respectively). Scores were measured on a scale of 1 ('Strongly disagree') to 4 points ('Strongly agree') using the 4-point Likert scale. The

total index of anger expression was calculated by 'anger-in + anger-out - anger control + 16' and ranged from 0 to 72 points. The total scores ranged from 8 to 32 points per sub-factor, which indicates that anger expression is positive as the scores of anger-in and anger-out are lower and the score of anger control is higher. The reliability of this tool was Cronbach's  $\alpha = .73$  for anger-in, Cronbach's  $\alpha = .74$  for anger-out, and Cronbach's  $\alpha = .81$  for anger control in the study by Chon Kyum-koo et al. [14] and Cronbach's  $\alpha = .81$  for anger-in, Cronbach's  $\alpha = .75$  for anger-out, and Cronbach's  $\alpha = .77$  for anger control in this study.

### 2.3.3. Psychological Well-Being

To calculate the scores of psychological well-being, Ryff [15]'s Psychological Well-Being Scale (PWBS) was used after it was modified and supplemented by Kim Myoung-so, Kim Hye-won, and Cha Kyeong-ho [16], with approval obtained via e-mail. This tool consists of self-acceptance (8 questions), environmental mastery (8 questions), positive relations with others (7 questions), autonomy (8 questions), purpose in life (7 questions), and personal growth (8 questions). Scores were measured on a scale of 1 ('Strongly disagree') to 6 points ('Strongly agree') using the 6-point Likert scale. The total score ranged from 46 to 230 points, indicating that the higher the score, the higher the level of psychological well-being. The overall reliability of the tool was Cronbach's  $\alpha = .92$  in the study by Kim Myoung-so, Kim Hye-won, and Cha Kyeong-ho [16], and Cronbach's  $\alpha = .93$  in this study.

### 2.4. Data Collection

As of July 2015, a request for cooperation to recruit subjects was sent to 20 psychiatric hospitals that were registered in the Health Insurance Review & Assessment Service in Korea. Sixteen psychiatric hospitals, which approved the request for cooperation, were selected as the study sites. The period of data collection ranged from July 22 to 31, 2015. The participants were informed of this study's objectives, withdrawal of consent, and discontinuation of participation, anonymity, etc. before data collection. Then, the subjects were requested to sign the informed consent form and to fill in the self-administered questionnaire.

### 2.5. Data Analysis

The collected data were analyzed using SPSS/WIN 21.0. The collected data were analyzed using SPSS/WIN 21.0. We obtained the mean and standard deviation for emotional labor, anger expression, and psychological well-being. Correlations among emotional labor, anger expression, and psychological well-being were analyzed using Pearson's correlation coefficient. Factors affecting psychological well-being were analyzed through stepwise multiple regression analysis.

## 3. Results

### 3.1. Levels of the Subjects' Emotional Labor, Anger Expression, and Psychological Well-Being

The levels of the subjects' emotional labor, anger expression, and psychological well-being are shown in [Table 1]. The scores of emotional labor were  $3.06 \pm 0.54$  points based on 5 points. The scores of anger expression were  $23.04 \pm 6.04$  points out of 72 points, and the scores of psychological well-being were  $3.41 \pm 0.40$  points out of 5 points.

**Table 1.** Levels of the subjects' emotional labor, anger expression, and psychological well-being ( $N=255$ )

	Range of value	Minimum	Maximum	M $\pm$ SD
Emotional labor	[1,5]	1.78	4.67	3.06 $\pm$ 0.54

Anger expression	[0,72]	5	38	23.04±6.04
Psychological well-being	[1,5]	2.17	4.54	3.41±0.40

### 3.2. Correlations among Emotional Labor, Anger Expression, and Psychological Well-Being

The correlations among emotional labor, anger expression, and psychological well-being are shown in [Table 2]. Psychological well-being was revealed to have a negative correlation with emotional labor ( $r=-.25$ ,  $p<.001$ ). A positive correlation ( $r=.26$ ,  $p<.001$ ) between emotional labor and anger expression was confirmed.

**Table 2.** Correlations among emotional labor, anger expression, and psychological well-being ( $N=255$ )

	Emotional labor	Anger expression	Psychological well-being
Emotional labor	1		
Anger expression	0.26** ( $<.001$ )	1	
Psychological well-being	-0.25** ( $<.001$ )	-0.34** ( $<.001$ )	1

### 3.3. Factors Affecting Psychological Well-Being

The factors affecting psychological well-being are shown in [Table 3]. To analyze the effects of variables on psychological well-being, a total of 17 independent variables were used, including 6 sub-factors of emotional labor and anger expression, which were found to be correlated as a result of correlation analysis; and the following 11 general characteristics — age (year), marital status (based on unmarried), the highest level of education (based on the 3-year undergraduate diploma), eligibility (based on the nurse), position (based on the general nurse), total service years (year), work unit (based on the psychiatric ward), working pattern (based on day duty), sleeping time (based on less than 5 hours), satisfaction with sleeping (based on satisfaction), and satisfaction with workplace (based on dissatisfaction), which showed a difference in psychological well-being. The variable which had the greatest effect on psychological well-being was anger-in ( $\beta=-.29$ ,  $p<.001$ ) as a sub-factor of anger expression, followed by the level of education: post-graduate diploma ( $\beta=.20$ ,  $p<.001$ ), a sub-factor of anger expression: anger control ( $\beta=.20$ ,  $p<.001$ ), and a sub-factor of emotional labor: mismatch of emotions ( $\beta=-.16$ ,  $p=.001$ ). That is, the score of psychological well-being was found to be higher with a lower score of anger-in, a higher score of anger control, and a lower score of mismatch of emotions. The proportions explained by variables included anger-in 13%, anger control 4%, and mismatch of emotions 2%, and the total explanatory power by a model was 27.0%, and the modified explanatory power was 25% ( $F=15.33$ ,  $p<.001$ ).

**Table 3.** Factors affecting psychological well-being ( $N=255$ )

	B	SE	$\beta$	t	p	R2 variance	Cumulative R2
(Constant)	3.40	0.18	-	18.87**	.000	-	-
Anger-in	-.28	0.06	-.29	-4.75**	.000	0.13	0.13
Level of education post-graduate diploma	0.22	0.06	0.20	3.62**	.000	0.06	0.19
Anger control	0.20	0.06	0.20	3.57**	.000	0.04	0.22

Mismatch of emotions	-0.09	0.03	-0.16	-2.59**	.010	0.02	0.24
Eligibility-mental health nurses	0.11	0.05	0.13	2.33**	.021	0.02	0.26
Marital status (1=married, 0=unmarried)	0.10	0.05	0.12	2.19*	.030	0.01	0.27

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Durbin-Watson=1.966, F=15.33, p<.001, R<sup>2</sup>=0.27, Adj-R<sup>2</sup>=0.25

1 \*: p<05, \*\*: p<.001

#### 4. Discussion

This study was conducted to identify the levels of psychiatric nurses' emotional labor, anger expression, and psychological well-being and determine the effects of emotional labor and anger expression on psychological well-being. With recent changes in medical environments where many hospitals have been focused on customer satisfaction, nurses are more likely to be exposed to situations requiring the suppression of emotion, leading to a higher intensity of their emotional labor. According to a study by Zapf, mismatch of emotions harms the role performance of nurses as it inhibits effective interactions between nurses and patients and reduces the efficiency of cognitive coping mechanisms [17-19]. In this study, the mean score of emotional labor in nurses was 3.06 points out of 5 points. As for senior welfare center employees [20] and workers in the service field [21], they scored 2.50 points and 3.61 points, respectively. This suggests that most of them experienced moderate or higher levels of emotional labor. Also, the difference in the score of nurses' emotional labor may depend on the hospital size, work unit, and performance role [20]. In not only this study and previous studies [22,23], the mean of frequency of emotional labor, among sub-factors of emotional labor, was the highest, followed by the attentiveness of emotional display and mismatch of emotions. For anger expression style, psychiatric nurses, the subjects of this study, tended to frequently use anger control which is an adaptive mode [13] in efforts to dominate and control anger. Anger-out and anger-in were dysfunctional, whereas anger control was functional among nurses. Therefore, it was revealed that when the levels of anger-out and anger-in increased, psychological well-being decreased, but the high level of anger controlled to a high level of psychological well-being. The score of psychological well-being in this study was 3.41 points, which is similar to the results of previous studies: 3.45 points in the study on nurses by Choi Yoon-jeong and Seong Young-hee [24] and 3.44 points in the study by Kim Eun-sook, Ryu So-yeon, Park Jong, and Choi Seong-woo [25]. Previous studies by Ryff [15] and Kim Myoung-so and Kim Hye-won [16], which pertained to psychological well-being and subjective well-being, found that self-acceptance and environmental mastery showed a strong correlation, among the factors determining the quality of personal life. Psychological well-being was found to be related to life satisfaction. In this study, the factor found to have the greatest effect on psychological well-being was anger-in. Psychological well-being was higher with a lower level of anger-in, a higher level of anger control, and a lower level of emotional mismatch.

#### 5. Conclusion

Most of the previous studies on nurses working at the department of psychiatry were conducted on a small number of subjects and in limited regions. This study was not limited to several regions and was targeted at nurses working for psychiatric hospitals nationwide. Moreover, there was no deviation between the working areas. According to the results of this study, education had a high proportion of the factors affecting psychological well-being, and a higher level of education led to a higher level of psychological well-being. Therefore, this study confirmed the necessity of professional knowledge, attitudes, and skills to be cultivated in psychiatric nurses. These traits will

help make high-quality, professional medical care services available to patients and establishing an effective hospital system, and also will have a positive effect on the psychological well-being of individuals. In this regard, educational systems for psychiatric nurses need to be actively introduced into Korea.

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