



# Factors Affecting Professional Self-Concept among Psychiatric Nurses in South Korea

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## Abstract

**Background:** We aimed to investigate factors affecting ego-resilience, emotional labor, and job satisfaction and their relationship with professional self-concept among psychiatric nurses.

**Methods:** The study was conducted among nurses working in four psychiatric wards: Sung Eun Medical Foundation Reference Hospital (Medical Corporation) in Jeongeup City, Korea; Dasarang Hospital in Gwangju, Korea; Saemirae Hospital in Gwangju (metropolitan city), Korea; and Jangseong Hospital in Jangseong-eup City, Korea. All nurses fully understood the purpose of the study and voluntarily agreed to participate. From August 14 to September 24, 2020, direct survey data were collected by a researcher using a structured questionnaire. Of the 136 questionnaires retrieved, 129 were used for analysis, while 7 were excluded due to incomplete or missing responses.

**Results:** Significantly different effects on professional self-concept were noted for the following general characteristics: age ( $P<0.001$ ), religion ( $P=0.024$ ), duration of nursing career ( $P=0.041$ ), position ( $P=0.021$ ), salary ( $P=0.016$ ), nursing job satisfaction ( $P=0.022$ ), and psychiatric nursing job satisfaction ( $P=0.010$ ). Moreover, professional self-concept was correlated with ego-resilience ( $r=0.62$ ,  $P<0.001$ ) and job satisfaction ( $r=0.41$ ,  $P<0.001$ ). In the multiple regression analysis, factors affecting professional self-concept included no religious preference ( $\beta=0.25$ ,  $P<0.001$ ), employment as a charge nurse ( $\beta=-0.20$ ,  $P=0.034$ ), and ego-resilience ( $\beta=0.58$ ,  $P<0.001$ ). The explanatory power was 42.1%.

**Conclusion:** Ego-resilience is the factor most strongly influencing professional self-concept. Furthermore, professional self-concept was stronger among those without religious preferences and those who held senior positions (charge nurse).

**Keywords:** Ego-resilience; Emotional labor; Job satisfaction; Professional self-concept; Psychiatric nursing

## Introduction

The modern healthcare environment is rapidly evolving, and the professional knowledge and skills expected of nurses continue to expand (1). Nurses may provide medical services for many

hours at a time and are often employed at locations closer to the patient when compared with other types of practitioners, demonstrating their key role in clinical settings (2). In particular, psy-



chiatric wards are highly stressful for nurses due to continuous, exhausting levels of stimulation (3,4). As such, the aforementioned stress of nurses not only negatively impacts health among nurses but also significantly influences their ability to manage it (5).

Professional self-concept, which involves the perception of one's capability, impact at work, etc., refers to the mental perception of oneself as a professional (6). If nurses can firmly establish their professional self-concept, they will be able to cope with conflicts that arise in clinical practice, solve internal problems well, and perform professional tasks efficiently (7). Ego-resilience refers to the ability to overcome difficult situations and suffering and to adapt flexibly according to environmental demands (8). A study of nurses working in the intensive care unit found that those with high ego-resilience had lower rates of burnout, depression, and anxiety, and previous studies have highlighted building resilience as a strategy to aid nurses in coping with occupational stress (9,10). In a professional context, emotional labor refers to the process of regulating one's feelings and emotional expressions for effective adaptation within an organization and achievement of organizational goals. It refers to the inner process of attempting to feel or experience emotions (11). Nurses working in chronic psychiatric wards experience a high degree of emotional crisis and increased stress (12). Job satisfaction is defined as a favorable attitude toward one's job, reflecting a positive psychological state that occurs when the job characteristics are varied and the job is clear (13). Job satisfaction contributes to better work performance, outcomes, and productivity (14,15).

Previous studies related to professional self-concept among nurses have investigated aspects such as self-esteem, age, and education level (16,17), although none have provided sufficient evidence to clarify which factors are significantly influential. Such information is necessary for preparing specific policies to improve work efficiency and job satisfaction while decreasing burnout among psychiatric nurses.

We aimed to identify factors affecting ego-resilience, emotional labor, and job satisfaction among psychiatric nurses and their relationship to professional self-concept.

## **Methods**

### ***Participants***

The participants of this study were nurses working in four psychiatric wards: Sung Eun Medical Foundation Reference Hospital (Medical Corporation) in Jeongeup City, Korea; Dasarang Hospital in Gwangju, Korea; Saemirae Hospital in Gwangju (metropolitan City), Korea; and Jangseong Hospital in Jangseong-eup City, Korea. All participants fully understood the purpose of the study and provided written informed consent to participate voluntarily.

The G\*Power program (G\*Power 3.1.9.2, Heinrich Heine University, Düsseldorf, Germany) was used to calculate the sample size based on an effect size of 0.15 and a significance level of 0.05, resulting in a total of 109 participants. Considering a dropout rate of 20%, a total of 136 questionnaires were distributed, and a total of 129 copies were used for the final analysis. The remaining seven were excluded due to missing or incomplete responses.

### ***Data collection and ethical considerations***

The data collection period was from August 14 to September 24, 2020. Data were collected after the researcher visited the hospital, explained the study and investigation method to the department head, and received approval for data collection.

This study was conducted after receiving approval from the Bioethics Review Committee (1041485-202007-HR-001-33) of Gwangju Women's University, Korea. The purpose and procedures of the study, as well as issues related to anonymity and confidentiality, were explained to the nurses at each hospital. Participants read and responded to the questionnaire themselves, which took approximately 10 min to complete.

### **Research instruments**

Ego-resilience was measured using a tool adapted from the Connor–Davidson Resilience Scale (18). A total of 25 items were used to assess strength, endurance, optimism, support, and five sub-factors related to spirituality. Items were rated using a 5-point Likert scale. Scores ranged from 25 to 125 points, with higher scores indicating a higher degree of ego-resilience. Cronbach's  $\alpha$  for this tool was 0.93 at the time of development (18) and 0.97 in this study.

Emotional labor was assessed using an emotional labor tool designed for nurses (19), which includes 16 items rated using a 5-point Likert scale. Scores ranged from 16 to 80 points, with higher scores indicating a higher degree of emotional labor. Cronbach's  $\alpha$  for this tool was 0.81 at the time of development (19) and 0.92 in this study.

Job satisfaction was evaluated using a tool designed to assess the parameter in doctors, nurses, and health workers (13). The assessment consisted of 30 items rated using a 5-point Likert scale. Scores ranged from 30 to 150 points, with higher scores indicating a higher degree of job satisfaction. Cronbach's  $\alpha$  for this tool was 0.89 at the time of development (13) and 0.90 in this study.

Professional self-concept was evaluated using a tool specific to nurses (20). The assessment included 27 items rated using a 4-point scale. Of the 27 items, 16 were related to professional practice, 7 were related to satisfaction, and 4 were related to communication. Scores ranged from 27 to 108 points, with higher scores indicating a stronger professional self-concept. Cronbach's  $\alpha$  for this tool was 0.85 at the time of development (20) and 0.88 in this study.

### **Statistical Analysis**

The collected data were analyzed using the SPSS/WIN 22.0 program (IBM Corp., Armonk, NY, USA), and the general characteristics of the participants were analyzed using real numbers and percentages. Ego-resilience, emotional labor, job satisfaction, and professional self-concept were compared in terms of the mean and standard deviation. Differences in professional self-concept according to general characteristics were

analyzed using independent t-tests or analyses of variance, and post hoc analyses were conducted using Scheffe's test. Correlations among ego-resilience, emotional labor, job satisfaction, and professional self-concept were analyzed using Pearson's correlation coefficients. Multiple regression analysis was used to identify factors independently affecting professional self-concept. Statistical significance was set at  $P < 0.05$ .

## **Results**

### **General characteristics of the participants**

Table 1 shows the general characteristics of the included participants. When analyzed according to age, the group accounting for the greatest proportion of participants included those ranging from 41–50 years old, followed by the 31–40, under 30, and over 51 age groups. Most participants were female, and the highest education levels were reported as follows: diploma, bachelor's degree, and post-graduate study. In terms of religious preference, "no religion" was the most common response, followed by Christianity, Catholicism, and Buddhism. Working three shifts was most common, followed by daytime work and night shift work. The average nursing career (months) was  $129.95 \pm 99.09$  months in duration, and those working 101–200 months accounted for the greatest proportion at 35.6%. In terms of position, the most common response was "staff nurse", and the most common salary was less than \$25,000. The most common response regarding nursing job satisfaction was "ordinary", followed by "gratification" and "dissatisfaction", and most participants reported experiences with job turnover. "Ordinary" was the most common response for psychiatric nursing job satisfaction, followed by "gratification" and "dissatisfaction".

### **Ego-resilience, emotional labor, job satisfaction, and professional self-concept among participants**

Among psychiatric nurses, the average ego-resilience score was  $3.33 \pm 0.74$  out of 5.00 points, while the average emotional labor score was

3.33±0.56 out of 5.00 points. The average score for job satisfaction was 2.90±0.43 out of 5.00 points, and the average score for professional

self-concept was 2.64±0.30 out of 4.00 points (Table 2).

**Table 1:** General characteristics of the included participants (n=129)

<i>Characteristics</i>	<i>Categories</i>	<i>n</i>	<i>%</i>	<i>Mean±standard deviation</i>
Age (yr)	Under 30	26	20.2	41.05±10.08
	31–40	27	20.9	
	41–50	59	45.7	
	Over 51	17	13.2	
Gender	Female	123	95.3	
	Male	6	4.7	
Marital status	Single	55	42.6	
	Married	74	57.4	
Highest level of education	Diploma	68	52.7	
	Bachelor's degree	52	40.3	
	Graduate study	9	7.0	
Religion	Christianity	41	31.8	
	Catholicism	18	14.0	
	Buddhism	11	8.5	
	No religion	59	45.7	
Type of work	Three shifts	57	44.2	
	Daytime work	55	42.6	
	Night shift	17	13.2	
Nursing career (months)	Under 50	40	31.0	129.95±99.09
	51–100	17	13.2	
	101–200	46	35.6	
	Over 201	26	20.2	
Position	Staff nurse	99	76.7	
	Charge nurse	30	23.3	
Salary (\$)	Under \$20,000	52	40.3	
	\$20,000–\$25,000	54	41.9	
	Over \$25,000	23	17.8	
Nursing job satisfaction	Dissatisfaction	12	9.3	
	Ordinary	79	61.2	
	Gratification	38	29.5	
Turnover experience	Yes	106	82.2	
	No	23	17.8	
Psychiatric nursing job satisfaction	Dissatisfaction	6	4.7	
	Ordinary	78	60.5	
	Gratification	45	34.8	

**Table 2:** Degrees of ego-resilience, emotional labor, job satisfaction, and professional self-concept among psychiatric nurses (n=129)

<i>Variables</i>	<i>Range</i>	<i>95% confidence interval</i>	<i>Mean±standard deviation</i>
Ego-resilience (points)	1–5	1.80–5.00	3.33±0.74
Emotional labor (points)	1–5	2.00–4.56	3.33±0.56
Job satisfaction (points)	1–5	2.00–4.23	2.90±0.43
Professional self-concept (points)	1–4	1.85–3.30	2.64±0.30

### Differences in professional self-concept according to general characteristics

Significantly different effects on professional self-concept were noted for the following general characteristics: age ( $P<0.001$ ), religion ( $P=0.024$ ), duration of nursing career ( $P=0.041$ ), position ( $P=0.021$ ), salary ( $P=0.016$ ), nursing job satisfaction ( $P=0.022$ ), and psychiatric nursing job satisfaction ( $P=0.010$ ). The average score for professional self-concept was  $2.72\pm0.21$  points in the 41–50 age group and  $2.73\pm0.35$  points in the over 51 age group, both of which were higher than that in the under 30 age group ( $2.45\pm0.36$  points). Significant differences in average professional self-concept scores were also observed based on position (charge nurse:  $2.75\pm0.29$

points; staff nurse:  $2.60\pm0.30$  points). Significant differences were also observed between those with incomes over \$25,000 and those with incomes under \$20,000 ( $2.74\pm0.34$  vs.  $2.55\pm0.34$  points, respectively). Those responding “gratification” for nursing job satisfaction had an average professional self-concept score of  $2.75\pm0.23$ , while those responding “ordinary” had an average score of  $2.58\pm0.31$ . In terms of psychiatric nursing job satisfaction, those responding “gratification” had an average professional self-concept score of  $2.74\pm0.25$ , while those responding “ordinary” had an average score of  $2.57\pm0.30$ , and the difference between the two groups was statistically significant (Table 3).

**Table 3:** Differences in professional self-concept according to the general characteristics of participants (N=129)

Characteristics	Categories	Mean±standard deviation	F/t	P	Scheffe's test
Age (yr)	Under 30 <sup>a</sup>	2.45±0.36	6.08	<0.001***	a<c,d
	31–40	2.59±0.31			
	41–50 <sup>c</sup>	2.72±0.21			
	Over 51 <sup>d</sup>	2.73±0.35			
Gender	Female	2.64±0.29	-0.05	0.962	
	Male	2.64±0.46			
Marital status	Single	2.58±0.33	-1.91	0.059	
	Married	2.68±0.27			
Highest level of education	Diploma	2.64±0.27	0.81	0.448	
	Bachelor's degree	2.62±0.35			
	Graduate study	2.75±0.23			
Religion	Christianity	2.62±0.27	3.25	0.024*	
	Catholicism	2.73±0.35			
	Buddhism	2.84±0.20			
Type of work	No religion	2.58±0.31	1.63	0.199	
	Three shifts	2.58±0.31			
	Daytime work	2.68±0.30			
Nursing career (months)	Night shift	2.68±0.27	2.83	0.041*	
	Under 50	2.56±0.37			
	51–100	2.57±0.25			
	101–200	2.68±0.22			
Position	Over 201	2.73±0.30	-2.34	0.021*	
	Staff nurse	2.60±0.30			
	Charge nurse	2.75±0.29			
Salary (\$)	Under \$20,000 <sup>a</sup>	2.55±0.34	4.31	0.016*	a<c
	\$20,000–\$25,000	2.68±0.22			
	Over \$25,000 <sup>c</sup>	2.74±0.34			
Nursing job satisfaction	Dissatisfaction	2.65±0.37	3.94	0.022*	b<c
	Ordinary <sup>b</sup>	2.58±0.31			
	Gratification <sup>c</sup>	2.75±0.23			
Turnover experience	Yes	2.64±0.31	0.01	0.997	
	No	2.64±0.25			
Psychiatric nursing job satisfaction	Dissatisfaction	2.67±0.44	4.74	0.010*	b<c
	Ordinary <sup>b</sup>	2.57±0.30			
	Gratification <sup>c</sup>	2.74±0.25			

\* $P<0.05$ , \*\* $P<0.01$ , \*\*\* $P<0.001$ , using the independent t-test or analysis of variance (Scheffe's post hoc test)

### Correlations among ego-resilience, emotional labor, job satisfaction, and professional self-concept

Our analyses indicated that professional self-concept exhibited a significant positive correlation with ego-resilience ( $r=0.62$ ,  $P<0.001$ ) and job satisfaction ( $r=0.41$ ,  $P<0.001$ ) (Table 4).

**Table 4:** Correlations among ego-resilience, emotional labor, job satisfaction, and professional self-concept (N=129)

Variable	Ego-resilience	Emotional labor	Job satisfaction	Professional self-concept
Ego-resilience	1.00			
Emotional labor	0.19 (0.032*)	1.00		
Job satisfaction	0.53 ( $<0.001^{***}$ )	0.10 (0.272)	1.00	
Professional self-concept	0.62 ( $<0.001^{***}$ )	-0.01 (0.906)	0.41 ( $<0.001^{***}$ )	1.00

\* $P<0.05$ , \*\*\* $P<0.001$ , using Pearson's correlation coefficients

### Factors influencing professional self-concept

Age, religion, nursing experience, position, salary, nursing job satisfaction, and psychiatric nursing job satisfaction exerted statistically significant effects on professional self-concept, and a stepwise regression analysis was conducted using these factors as independent variables. Age, religion, nursing experience, position, salary, nursing job satisfaction, and psychiatric satisfaction were analyzed as dummy variables. Given multicollinearity and the basic assumption of stepwise multiple regression analysis, the Durbin–Watson value was 1.65. Multicollinearity testing revealed that the tolerance was 0.49–0.78 (more than 0.10), and the variance expansion factor (VIF) value was 1.19–2.03 (less than 10.00), indicating that

the basic assumption for performing stepwise multiple regression analysis had been satisfied. Stepwise multiple regression analysis identified ego-resilience ( $\beta=0.58$ ,  $P<0.001$ ), no religious preference ( $\beta=0.25$ ,  $P<0.001$ ), and employment as a charge nurse ( $\beta=-0.20$ ,  $P=0.034$ ) as factors significantly influencing professional self-concept. That is, a higher degree of ego-resilience or a lack of religious preference was associated with a stronger professional self-concept. In contrast, stronger professional self-concept was associated with lower-level positions. The F statistic for the fit of the estimated regression model was found to be significant ( $F=8.15$ ,  $P<0.001$ ), and the explanatory power was 42.1% (Table 5).

**Table 5:** Factors influencing professional self-concept (n=129)

Variables	Non-standardized coefficient (B)	Standard error	Standardized coefficient ( $\beta$ )	t	P	Tolerance	Variance expansion factor
(Constant)	2.04	0.31		6.60	$<0.001^{***}$		
Religion (No religion)	0.27	0.08	0.25	3.32	$<0.001^{***}$	0.78	1.29
Position (Charge nurse)	-0.14	0.06	-0.20	-2.15	0.034*	0.55	1.82
Ego-resilience	0.24	0.04	0.58	6.03	$<0.001^{***}$	0.49	2.03

F=8.15 ( $P<0.001$ ), Adj.R2=0.421, Durbin–Watson 1.65

Dummy variables: religion, position

\* $P<0.05$ , \*\*\* $P<0.001$ , tested by multiple regression analysis.

## Discussion

The present study aimed to provide basic data regarding the factors that influence ego-resilience, emotional labor, and job satisfaction and their effects on professional self-concept in psychiatric nurses. The average ego-resilience score in this study was  $3.33 \pm 0.74$  out of 5.00 points. Although the authors used a different assessment tool, this value is higher than that reported in a previous study targeting psychiatric nurses (2.60) (21), which may be related to differences in participant age between the two studies. The majority of participants in our study were over the age of 41 (58.9%), whereas most participants in the previous study (21) were under 35 years old (78.8%). Another previous study (22) reported that ego-resilience was lower among nurses with relatively less experience, which may have also been related to age differences. As lower ego-resilience can significantly influence the ability to successfully cope with stress or crises, the available evidence supports the need for the development and application of educational programs that can improve ego-resilience among psychiatric nurses.

In this study, the average emotional labor score among psychiatric nurses was  $3.33 \pm 0.56$  out of 5.00 points, which was above average. However, this score was lower than that reported in a previous study targeting hospital nurses (3.90) (23), which may reflect the difference between general and psychiatric nursing. Other previous studies (24,25) have reported that psychiatric nurses often engage in emotional labor while on duty; however, they are also constantly engaged in mental health education and training that they can use as therapeutic tools for themselves, indicating that they may have a better ability to regulate their emotions. Another study also reported that nurses with high emotional intelligence are more effective in applying emotional regulation strategies (25).

The average job satisfaction score of the participants in this study was  $2.90 \pm 0.43$  out of 5.00 points, which is slightly lower than the score of

3.04 points reported in a previous study (26) targeting psychiatric nurses using the same tools used in the current study. However, the difference is not significant. Research has demonstrated that job satisfaction is related to age (27) and structural empowerment (28). In the current study, 31.0% of participants had less than 5 years of work experience, while 26.7% had more than 10 years of experience. In a previous study (26), these rates were 55.8% and 47.9%, respectively. The absence of significant differences in age or work experience may explain the lack of a significant difference in job satisfaction between the studies.

In our study, the average professional self-concept score was  $2.64 \pm 0.30$  out of 4.00 points, which was above the average score but lower than the score of 3.42 points observed in a study targeting Canadian nurses (29). This value also corresponded to the lowest score range based on data reported for 11 countries (30). This may be because nursing has traditionally been considered a women's occupation, and this perception remains in some regions of the world (31). In particular, this perception is prevalent in Korea given its Eastern culture.

Our analysis indicated that age, religion, nursing experience (months), position, salary, nursing job satisfaction, and psychiatric nursing job satisfaction significantly influenced the degree of professional self-concept. These findings are consistent with those of a previous study reporting that older age (17) is associated with stronger professional self-concept. These results suggest that continuous occupational activity leads to improvements in professional self-concept, while it can be assumed that higher salaries naturally result in greater job satisfaction. Therefore, psychiatric nurses should be given a reasonable salary.

Professional self-concept exhibited a significant positive correlation with ego-resilience and job satisfaction. A previous study targeting psychiatric nurses also reported a significant positive correlation between professional self-concept and job satisfaction (32). Although ego-resilience among psychiatric nurses is an important topic,

few studies have examined its relationship to professional self-concept, making a direct comparison with previous results difficult. In a study targeting novice nurses working in a general ward, the authors reported a positive correlation between ego-resilience and professional self-concept (33). Taken together, these results indicate that higher ego-resilience and job satisfaction will lead to a stronger professional self-concept. Moreover, the available evidence highlights the need to develop an educational plan that can enhance ego-resilience and job satisfaction among psychiatric nurses, thereby leading to improvements in professional self-concept.

Our multiple regression analysis indicated that ego-resilience, absence of a religious preference, and the position of senior nurse or higher significantly influenced professional self-concept among psychiatric nurses, and the overall explanatory power of these variables was 42.1%. Although ego-resilience was identified as the most important factor influencing professional self-concept, few studies have reported a correlation between ego-resilience and professional self-concept in nurses, making comparative analysis difficult. Nevertheless, a study of nursing students (34) confirmed ego-resilience as an important variable affecting professional self-concept. Another study (35) targeting nurse managers reported that the type of hospital significantly influenced professional self-concept. Immediate changes or improvements in the work environment (e.g., religion or position) are difficult in real-world settings. However, strengthening ego-resilience, which reflects the psychological and social adaptability required to effectively cope with various situations and induce positive results, may be an effective alternative when attempting to strengthen professional self-concept in psychiatric nurses.

This study had some limitations. Given that the study participants were limited to nurses from only four hospitals, the sample size was small, which may affect the generalizability of the results. Moreover, a limited number of factors were examined in this study, highlighting the need for additional studies to examine a variety of poten-

tially influential factors. Finally, although we performed a quantitative analysis, further studies involving qualitative research methods (e.g., in-depth interviews with psychiatric nurses) are required, as these may complement and aid in interpreting our results.

## **Conclusion**

The current findings indicate that ego-resilience is the most powerful factor influencing professional self-concept among psychiatric nurses. Professional self-concept was stronger among nurses with no religious preference and those employed in high-level positions (charge nurses). These findings emphasize the need to establish an ego-resilience reinforcement program and human management strategies for improving professional self-concept. Achieving this goal will require the development and application of intervention programs for strengthening ego-resilience in psychiatric nurses. Thus, further well-designed studies are necessary.

## **Ethical considerations**

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors

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## **Conflict of Interest**

The authors have no conflicts of interest to declare.

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