

# The Effect of Psychological Empowerment Program on Manager Nurses' on Distress and Professional Quality of Life

#### **Abstract**

**Background:** The aim of this study was to investigate the impact of a psychological empowerment program on manager nurses' psychological distress and professional quality of life.

**Methods:** This study had a quasi-experimental design in a single-group pre-post-test model. This study was conducted with 20 manager nurses working in an education and research hospital in Izmir, Turkey. The psychological empowerment program consists of 2 sessions running for 8 hours, 4 hours each. The General Health Questionnaire was used to evaluate distress levels, and the Professional Quality of Life Scale was used to evaluate the professional quality of life levels of the manager nurses. Data were evaluated by paired t-test.

**Results:** After the psychological empowerment program, it was found that the level of distress, compassion fatigue, and burnout of the nurses decreased and that their compassion satisfaction increased.

**Conclusion:** It is seen that psychological empowerment interventions directed toward manager nurses reduce the mental risks of nurses. In this sense, it is recommended that empowerment programs be implemented for manager nurses in institutions and that the effectiveness of these programs with research designs that have high levels of evidence be evaluated.

Keywords: Professional quality of life, manager nurses, burnout, psychological distress, psychological empowerment

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# Introduction

Manager nurses are responsible for improving the quality of patient care at the unit level and for creating a healthy and safe work environment for employees and have a critical role in the success of the organization, employee satisfaction, and patient outcomes.1 Manager nurses experience high levels of stress owing to their position of high responsibility and expectations and especially owing to the inadequacy of human resources and materials, excessive workload, and senior management's expectations.<sup>2-4</sup> In a study conducted among manager nurses, exposure to high job-related demands for a long time, insufficient resources, and low social support were found to be the determinants of job-related stress.<sup>5</sup> In another study, it was found that manager nurses experience time pressure, do not get enough social support, experience role conflict, and experience high levels of burnout.6 In a study conducted in Turkey, manager nurses cited having to work with untrained personnel, low wages, long working hours, insufficient safety of the work environment, conflict between employees, lack of equipment, and workload as the reasons for stress.7 In another study conducted in Turkey, it was found that the most frequently mentioned problems by the manager nurses are an expectation of off-duty tasks from the manager nurses; inadequacy of tools and equipment; inadequate communication and cooperation; and conflicts related to physicians, patients, and their relatives.8

The problems that manager nurses face in the work environment negatively impact the mental and physical health of the nurses as well as cause negative results for the work. Findings are showing that the problems experienced by nurses in the work environment negatively impact professional quality of life. In the study conducted by Shirey et al. In the was found that the situation of the manager nurses leads to negative results. Manager nurses are exposed to stress-related consequences such as anger, frustration, anxiety, insomnia, restlessness, and muscle tension. In another study conducted among manager nurses, it was reported that the nurses have low job satisfaction, intention to quit, and physical and mental symptoms. In a study conducted among manager nurses in Canada, it was found that manager nurses had a high level of job-related stress, experienced burnout, and thought of quitting. It is emphasized that manager nurses should be supported both organizationally and individually. In

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It is stated that manager nurses are effective in providing quality health care and keeping nurses in the profession. For this reason, it is emphasized that supporting manager nurses and reducing their stress levels is a priority for health institutions.3 In a study conducted in England, it was stated that improving the coping skills of nurses for reducing work-related stress is of great importance. The meaning given to stress by the individual is an issue that should be emphasized. 14 An essential strategy of reducing occupational stress is by individually strengthening the nurses. In a systematic review published recently. it is stated that there is evidence that cognitive approaches, one of the individual-oriented approaches, are useful in reducing work-related stress.<sup>15</sup> It is known that manager nurses experience high levels of stress; however, the results of studies on work-related stress of manager nurses mostly consist of descriptive studies.3,11,13 There are studies on empowering nurses in the work environment, but the samples of those studies do not include manager nurses; they include only clinical nurses. 15 In this sense, it is thought that the results of this interventional study based on cognitive approaches to reduce psychological distress experienced by manager nurses and to improve the professional quality of life can provide important data and be a guide for more comprehensive studies to be conducted in the future.

## **Purpose**

The purpose of this study is to examine the impact of a psychological strengthening program for manager nurses on psychological distress and professional quality of life.

### Hypotheses

The following hypotheses were made:

 ${\rm H_{0.1}}$ : After the psychological strengthening program, there will be no significant difference between the psychological distress scores of the manager nurses and the scores before the program.

 $\rm H_{0.2}$ : After the psychological strengthening program, there will be no significant difference between the compassion satisfaction scores of the manager nurses and the scores before the program.

 ${\rm H_{0.3}}$ : After the psychological strengthening program, there will be no significant difference between the burnout scores of the manager nurses and the scores before the program.

 $\rm H_{0.4}$ : After the psychological strengthening program, there will be no significant difference between the compassion fatigue scores of the manager nurses and the scores before the program.

# Material and Methods

## Study Type

This study was designed as a semiexperimental study in a single group pretest-post-test model to examine the impact of a psychological strengthening program on the psychological distress and professional quality of life of manager nurses.

# Research Location and Sample

This research was conducted in an education and research hospital in İzmir province, Turkey. Manager nurses work 40 hours a week, between 8 am and 4 pm. The psychological strengthening program consists of 2 sessions for 4 hours each, 8 hours in total. Nurses who have been working as manager nurses for at least 6 months and were willing to participate in the program were invited. A total of 20 of 24 manager nurses working at the hospital volunteered to participate in the program, and 4 of the manager nurses did not agree to participate, stating that they did not have time to participate in the program.

Because a similar study with manager nurses could not be found, a power analysis was not carried out before the study, and at the end of the study, the power of the study was evaluated with the data of the research. Taking psychological distress as the primary variable, using the G\*Power program, the power of the study was calculated as 0.81. This result shows that the power of the research is sufficient.

#### **Data Collection**

Data were collected twice from the manager nurses who accepted to participate in the program—before and after the program—between January 15, 2018 and January 30, 2018. The nurses filled the questionnaire forms provided in sealed envelopes at their convenience and returned them to the education nurse in envelopes, and the researchers received the filled-out questionnaires from the education nurse.

#### **Data Collection Tools**

Personal Information Form: In this form, there were 6 questions about the personal characteristics of the manager nurses, such as age, education level, marital status, and their experiences in work life.

General Health Questionnaire: The General Health Questionnaire (GHQ) was used to measure the psychological distress levels of the nurses. The GHQ was developed by David Goldberg in 1972.¹⁵ The GHQ is a 4-point Likert-type scale that attempts to reveal mental disorders and examines the mental symptoms of the last few weeks. Among the answers given to the questions in the questionnaire, options a and b are scored 0 point, options c and d are scored 1 point, and the total score may range between 0 and 12. Those who score ≥2 in the study are considered to be the group at risk of mental problems according to the GHQ-12 result. The validity and reliability tests of the Turkish version of the questionnaire were carried out by Kılıç in 1996. The internal consistency coefficient for GHQ-12 was found to be 0.78.¹¹ In this study, the Cronbach's alpha value of the scale was found to be 0.93.

Professional Quality of Life Scale: The Professional Quality of Life Scale (ProQOL) developed by Stamm<sup>18</sup> in 2005 was used to evaluate the professional quality of life of the participating nurses. The scale was developed to identify the signs of compassion satisfaction, compassion fatigue, and burnout. The scale is an assessment tool consisting of 30 items and 3 subscales. Compassion satisfaction is the first of the subscales; it is measured by the 3rd, 6th, 12th, 16th, 18th, 20th, 22nd, 24th, 27th, and 30th items (Cronbach's alpha value is 0.87), and it expresses employees' sense of satisfaction as a result of helping another person in need of assistance in an area related to their profession. A high score obtained from this subscale indicates the level of satisfaction gained from helping someone. The second subscale, burnout, is the part that measures the feeling of burnout that emerges as a result of hopelessness and difficulties in coping with problems in work life; this is measured by the 1st, 4th, 8th, 10th, 15th, 17th, 19th, 21st, 26th, and 29th items (Cronbach's alpha value is 0.72). A high score obtained from this subscale indicates a high level of burnout. Compassion fatigue, the third subscale, measures the symptoms that occur as a result of encountering a stressful event; it is measured by the 2nd, 5th, 7th, 9th, 11th, 13th, 14th, 23rd, 25th, and 28th items (Cronbach's alpha value is 0.80). Yeşil et al. in 2010 verified the validity and reliability of the ProQOL. The Cronbach's alpha value of the ProQOL in the validity and reliability study was found to be 0.84. The Cronbach's alpha value of the compassion satisfaction subdimension was found to be 0.81, the Cronbach's alpha value of the burnout subdimension was found to be 0.62, and the Cronbach's alpha value of the compassion fatigue subdimension was found to be 0.83.

Table 1. Sessions of the Psychological Strengthening Program				
Session 1				
First half of the first session	Presenting the content of the program			
	Group policies and rules			
	The concept of self-knowledge			
	Recognizing one's own strengths and weaknesses			
	Reviewing one's goals and priorities in life			
	A letter from the future older me to the present			
	Recess			
Second half of the first session	Raising awareness about coping methods used by manager nurses			
	Recognizing manager nurses' cognitive distortions of themselves			
	Creating alternative ways of thinking about the self for manager nurses			
	A letter from my childhood to the present			
Session 2				
First half of the second session	Recognizing manager nurses' cognitive distortions of their profession			
	Exercises related to learned helplessness			
	Creating alternative ways of thinking about the profession			
	Recess			
Second half of the second session	Discussing examples of work-related situations that increase the stress levels of manager nurses in the workplace			
	Raising awareness about the nurses' cognitive distortions through case examples and creating alternative ways of thinking			
	Getting feedback about the program			

During the evaluation of the scores obtained from the scale, items 1, 4, 15, 17, and 29 are the items that need to be calculated by reversing. The items in the scale were evaluated on a 6-step chart ranging from "Never" (0) to "Very often" (5). The level of psychopathology increases with an increase in burnout and compassion fatigue. With increasing compassion satisfaction, the levels of psychopathology and burnout decrease. In this study, the Cronbach's alpha value of the compassion satisfaction subdimension was found to be 0.85, the Cronbach's alpha value of burnout subdimension was found to be 0.65, and the Cronbach's alpha value of the compassion fatigue subdimension was found to be 0.88.

## **Psychological Strengthening Program**

This program consists of 2 sessions and 8 hours in total, and its purpose is to strengthen the psychological health of the manager nurses. The program was created by the researcher by examining the literature and considering the needs of nurses. Expert opinions were obtained from 2 psychiatric nurses regarding the content and structure of the program. The program was held in a meeting room in a well-lit and quiet section of the hospital. Food and drinks were provided to the manager nurses, and a warm atmosphere was created. The program was implemented by the first author of this study. The first author, who is a psychiatry nurse, received training in cognitive behavioral therapy and previously actively conducted programs toward strengthening nurses. The content and structure of the sessions in the program are based on cognitive structuring principles. The sessions of the program are shown in Table 1.

#### Ethical Aspect of the Research

Permissions related to the research were obtained from the related Dokuz Eylül University ethics committee for noniterventional studies (3109-GOA). The manager nurses participating in the study were included in the program on a voluntary basis. Verbal consent was obtained from the nurses participating in the study. The research questionnaire was distributed and collected in a sealed envelope. The study was carried out in accordance with the principles of the Declaration of Helsinki.

# Statistical Analysis

Data were analyzed using the Statistical Program for the Social Sciences (SPSS) 22.0 package program (IBM Corp.; Armonk, NY, USA). Descriptive statistics were evaluated with numbers and percentages and mean and standard deviation. The normal distribution characteristics of the data were analyzed with the Kolmogorov-Smirnov test. Because the data had a normal distribution, the dependent t-test was used to compare the scale scores of the manager nurses before and after the program. The significance level in the study was taken as P < .05.

# Limitations of the Study

The small sample size of the study, the absence of a control group, and the lack of longitudinal follow-up of outcome variables are the limitations of this study.

#### Results

The average age of the nurses participating in the study was 40.45±5.01 years. All of the nurses were female, 60% were married,

Table 2. Sociodemographic Characteristics of Manager Nurses (N = 20)					
Characteristics	Mean	SD			
Age, years	40.45	5.01			
Gender	n	%			
Female	20	100.0			
Male	-	-			
Marital status					
Married	12	60.0			
Single	8	40.0			
Education					
Vocational school	1	5.0			
Bachelor's degree	12	60.0			
Master's degree	7	35.0			
Years of employ- ment					
6-10	2	10.0			
11-15	1	5.0			
≥16	17	85.0			
Total	20	100.0			
SD: standard deviation.					

Table 3. Comparison of the Psychological Distress Scores of the Manager Nurses Through Time (N = 20)

Tool	Pretest	Post-test	t	df	Р
GHQ, mean±SD	4.10 ± 1.50	1.45 ± 2.96	3.803	19	.001*

\*P < .01; t: Paired t-test; df: difference; GHQ: General Health Questionnaire; SD: standard deviation.

**Table 4.** Comparison of Professional Quality of Life Subscale Scores of the Manager Nurses Through Time

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Subscale of ProQOL	Pretest mean±SD	Post-test mean±SD	t	df	Р
Compassion Satisfaction	29.40 ± 7.75	32.04 ± 7.47	-2.66	19	.015*
Burnout	21.80 ± 4.77	19.85 ± 4.96	2.22	19	.039*
Compassion fatigue	17.19 ± 6.92	14.21 ± 7.85	2.26	19	.035*

\*P < .05, paired t-test; df: difference; ProQOL: Professional Quality of Life Scale; SD: standard deviation.

and the majority of them had undergraduate degrees. It was found that 85% of the nurses in the study had a working period of  $\geq$ 16 years (Table 2).

The psychological distress mean scores of the manager nurses before and after the psychological strengthening program are provid-

ed in Table 3. A statistically significant difference was found in the psychological distress mean scores of the nurses before and after the program. The psychological distress mean scores of the nurses before the program were higher than those after the program (t [19]=3.803, P = .001).

## **Compassion Satisfaction**

After the statistical analysis of the nurses' compassion satisfaction score averages over time, it was found that the mean compassion satisfaction score before the program was statistically significantly lower than the score after the program (t [19]= -2.66, P= .015). After the program, the compassion satisfaction score averages of the nurses increased (Table 4).

#### Burnout

There was a statistically significant difference in the burnout subscale mean scores of the nurses before and after the psychological strengthening program. The burnout mean scores of the nurses before the program were lower than those after the program (t [19]=2.22, P = .039) (Table 4).

## Compassion Fatigue

There was a statistically significant difference in the compassion fatigue subscale mean scores of the nurses before and after the psychological strengthening program. The compassion fatigue mean scores of the nurses after the program were lower than those before the program (t [19]=2.26, P = .035) (Table 4).

#### Discussion

From the result of this study, which was carried out to examine the impact of psychological strengthening program for manager nurses on their psychological distress and professional quality of life, it was found that the program was effective in reducing the psychological distress of manager nurses and increasing their professional quality of life.

Even though similar studies on the psychological strengthening of manager nurses are not available in the literature, it is possible to find results of other studies conducted among nurses other than manager nurses. In this study, it was found that the psychological strengthening program for manager nurses had an impact on their psychological distress. The psychological strengthening program that was carried out has content on the basis of cognitive approaches. In the literature, there are results showing that cognitive approaches are effective in programs that aim to reduce work-related stress and burnout.20-22 In a systematic review by Ruotsalainen et al.<sup>15</sup> that includes practices aimed at preventing stress in the workplace, it is stated that cognitive-based programs reduce stress levels by 18%. Programs that aim to prevent depression in the workplace were examined by Tan et al.23 On the basis of the result of this study, cognitive-based programs were revealed to be effective in reducing mental risks. In a systematic review by Joyce et al.24 that examined interventional studies on depression and anxiety, it was found that stress management programs with a cognitive approach are more effective in reducing mental risks than programs with other approaches. The findings of this study support these literature findings.

On the basis of the program implemented in this study, a positive change was achieved in all subdimensions of the ProQOL. There are various interventional studies in the literature that aim to improve the professional quality of life. In a study conducted by Yılmaz et al.<sup>25</sup> among nurses caring for oncology patients, a psychoeducation program was carried out with the nurses. As a result of the program, a positive

change was achieved in the scores of the nurses in all dimensions of the ProQOL.<sup>25</sup> In a study conducted by Flarity et al.<sup>26</sup> among nurses from an emergency department, a positive change in all the subdimensions of the ProQOL was achieved as a result of the interventional program aimed at improving self-care and psychological resilience. Even though the program applied in this study consists of 2 sessions and 8 hours, it is noteworthy that it created a positive change in all the parameters. The fact that the researcher who implemented the program had been working on improving the mental health of nurses for many years and is experienced in the subject may have had an impact on these results. In addition, the fact that the manager nurses who volunteered to participate in the research were enthusiastic about the program and the fact that it was an initiative toward a group who needed this type of program may have yielded effective results. The fact that such research and improvements are mostly aimed at clinical nurses and the fact that there are no such programs for manager nurses may also have been an effective factor. During the execution of the program, the manager nurses also expressed this situation. In the program applied in this study, the perceptions of manager nurses toward themselves and the nursing profession were discussed. With this content, the program may have helped individuals to review their negative perceptions about the job and themselves. Although with different content or different samples, it is seen that programs aimed at strengthening nurses are effective in improving the professional quality of life and reducing the psychological risks of the nurses. In this sense, implementing programs that aim to strengthen nurses in the work environment and including and supporting manager nurses with these programs can result in positive changes.

## Conclusion

As a result of this study, it was found that a cognitive-based program for psychological strengthening of manager nurses was effective in reducing the nurses' psychological distress and improving their professional quality of life. It is a necessity to carry out programs that aim to support manager nurses and to improve their mental health in the workplace. Although this study makes an important contribution, it is recommended that other programs aimed at strengthening manager nurses be tested with larger samples and with research designs that have high levels of evidence.

Ethics Committee Approval: Ethics committee approval was received for this study from the Dokuz Eylül University.

Informed Consent: Written and verbal consents were obtained from the nurses participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - N.G., F.Ş.İ.; Design - N.G., F.Ş.İ.; Data Collection and/or Processing - N.G., F.Ş.İ., E.E., S.M.Ü.; Analysis and/or Interpretation - N.G., F.Ş.İ., E.E., S.M.Ü.; Writing - N.G., F.Ş.İ.; Critical Reviews - N.G., F.Ş.İ.

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