

# Training program to strengthen nurses’ psychological empowerment using neuro-linguistic programming techniques

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 07/07/2025	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 04/07/2025	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Nurses often face high levels of stress, workload, and emotional demands in clinical settings, which can negatively impact their sense of control, motivation, and job satisfaction. Psychological empowerment is known to help nurses feel more confident, autonomous, and engaged in their work. This study aimed to examine whether a structured training program based on Neuro-Linguistic Programming (NLP) techniques could improve nurses’ psychological empowerment. NLP is a communication-based method that helps individuals change unhelpful thinking patterns and behaviors. The study also explored nurses’ perceptions of empowerment and their experiences with the training.

### Who can participate?

The study was open to full-time registered nurses working in a foundation university hospital in Istanbul, Türkiye. Eligible participants had completed institutional orientation and were not involved in other psychological or professional development programs during the study period. All participants provided informed consent before joining the study.

### What does the study involve?

The study had two parts: a quantitative evaluation and a qualitative focus group. In the quantitative part, 70 nurses were randomly selected from a group of 128 eligible staff. They were assigned to either the intervention group or the control group using a method based on the alphabetical order of their surnames. The intervention group attended a structured NLP-based psychological empowerment program, consisting of five 3-hour sessions held once a week over 5 weeks. The training included techniques for improving self-awareness, goal setting, emotional regulation, and communication. The control group received no training during the study. In the qualitative part, two focus group interviews were conducted. One group met before the training to discuss their views on empowerment and training needs, and another group met one month after the training to share their experiences and perceived changes.

### What are the possible benefits and risks of participating?

Participants in the intervention group may benefit from improved communication skills,

confidence, and coping abilities. These improvements can contribute to increased job satisfaction and a stronger sense of professional identity. There were no known physical or psychological risks associated with participation. Participation was voluntary, and nurses were free to withdraw at any time without any consequences.

Where is the study run from?

The study was conducted at a foundation university hospital in Istanbul, Türkiye, which is accredited by international healthcare quality standards and provides diverse clinical services.

When is the study starting and how long is it expected to run for?

May 2020 to January 2023. The data collection and training program took place over a total period of approximately 4 months.

Who is funding the study?

The study was not funded by any external organization. It was conducted by the research team as part of an academic project within the institutional framework.

Who is the main contact?

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## Contact information

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Public, Scientific, Principal Investigator

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## Additional identifiers

### EudraCT/CTIS number

Nil known

### IRAS number

### ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

Nil known

# Study information

## Scientific Title

Improving nurses' psychological empowerment through structured neuro-linguistic programming training: a quasi-experimental mixed-methods approach

## Acronym

NLP-PE

## Study objectives

The primary objective of this study is to evaluate the effectiveness of a structured neuro-linguistic programming (NLP) training program in enhancing psychological empowerment among clinical nurses.

Secondary objectives include examining changes in the four dimensions of psychological empowerment - meaning, competence, self-determination, and impact - as well as exploring nurses' subjective experiences of empowerment before and after the intervention through qualitative focus group interviews.

## Ethics approval required

Ethics approval required

## Ethics approval(s)

Approved 22/05/2020, Yeditepe University Clinical Research Ethics Committee (İnönü Mah. Kayışdağı Cd. No:326/A, Ataşehir, İstanbul, 34755, Türkiye; +90 (0)2165780000; turgay.celik@yeditepe.edu.tr), ref: 1221

## Study design

Convergent mixed-methods quasi-experimental design involving both quantitative and qualitative components

## Primary study design

Interventional

## Secondary study design

Convergent mixed-methods design

## Study setting(s)

Hospital

## Study type(s)

Quality of life, Treatment, Efficacy

## Participant information sheet

## Health condition(s) or problem(s) studied

Psychological empowerment deficits among clinical nurses

## **Interventions**

Seventy full-time registered nurses were randomly assigned to either an intervention group (n = 35), which received a structured NLP-based psychological empowerment training, or a control group (n = 35), which received no intervention.

The participants were allocated to either the intervention or control group using a systematic assignment method: based on the alphabetical order of surnames, nurses were numbered, and those with odd numbers were assigned to the intervention group, while even-numbered nurses were assigned to the control group. This approach provided a structured, unbiased allocation mechanism that helped maintain balance between groups while considering operational feasibility within the hospital.

### **Group 1 – Intervention group**

Name of intervention: Structured NLP-Based Psychological Empowerment Training

Type: Behavioral / Educational

Details: A structured neuro-linguistic programming (NLP) training program delivered over five 3-hour sessions (total 15 hours) in one week. The program was designed using the ADDIE model and included techniques such as anchoring, reframing, meta-model questioning, perceptual positions, and well-formed outcomes. The sessions were conducted face-to-face by a certified NLP trainer and a nurse educator during non-shift hours. The aim was to enhance nurses' psychological empowerment across four dimensions: meaning, competence, self-determination, and impact.

Frequency and duration: 5 sessions, each 3 hours, over 1 week (total: 15 hours)

Delivery mode: In-person (face-to-face, group format)

Who delivered the intervention: Certified NLP practitioner (also a nurse educator)

### **Group 2 – Control group**

Name of intervention: No intervention (Control group)

Type: None

Details: Participants in the control group did not receive any intervention during the study period. They completed the Psychological Empowerment Scale (PES) at baseline and 1-month follow-up only. No placebo, alternative training, or attention-control was administered.

Quantitative data were collected at three timepoints: pretest, immediate posttest, and one-month follow-up using the Psychological Empowerment Scale (PES).

Qualitative data were obtained through pre- and post-intervention focus group interviews with a subset of participants (n = 12) to explore subjective experiences and perceived changes.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Psychological empowerment levels measured using the Psychological Empowerment Scale (PES) at three timepoints: T1 (Pretest): before the intervention, T2 (Immediate Post-test): after the final session, and T3 (Follow-up): 1 month after the intervention. The PES assesses four subdimensions: meaning, competence, self-determination, and impact. Scores are based on a 5-point Likert scale. Higher scores indicate higher psychological empowerment. Group differences and changes over time were evaluated using appropriate statistical tests.

## **Secondary outcome measures**

Subjective experiences of psychological empowerment, collected through semi-structured focus group interviews conducted pre- and post-intervention with a purposive sample of nurses from the intervention group (n = 12). Thematic analysis was used to explore changes in participants' perceptions of meaning, competence, self-determination, and impact. Key themes included role clarity, emotional regulation, professional confidence, and goal orientation.

**Overall study start date**

22/05/2020

**Completion date**

15/01/2023

## Eligibility

**Key inclusion criteria**

1. Full-time registered nurses employed at the participating university hospital
2. Completed institutional orientation and actively working in clinical care units
3. Aged 18 years or older
4. Able to communicate in Turkish
5. Provided informed consent to participate in the study
6. Not participating in any other psychological or empowerment-related training programs during the study period

**Participant type(s)**

Health professional

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

70

**Total final enrolment**

70

**Key exclusion criteria**

1. Nurses currently participating in any other psychological or professional development training programs
2. Part-time, per diem, or temporary contract nurses
3. Administrative or non-clinical nursing staff
4. Inability to attend all training sessions (for the intervention group)
5. Refusal to provide informed consent
6. Presence of serious physical or mental health conditions that could interfere with participation

**Date of first enrolment**

10/10/2022

**Date of final enrolment**

14/01/2023

## Locations

**Countries of recruitment**

Türkiye

**Study participating centre****Yeditepe University Hospital**

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**ROR**

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## Funder(s)

**Funder type**

Other

Funder Name

Investigator initiated and funded

Results and Publications

Publication and dissemination plan

The results of this study will be submitted for publication in a peer-reviewed scientific journal in the field of nursing and healthcare, specifically targeting international open-access journals such as BMC Nursing. The authors intend to present the findings at national and international nursing and healthcare conferences. A summary of the results will also be shared with participating nurses and hospital stakeholders to promote professional development and application of evidence-based empowerment strategies in clinical settings. No commercial funding or conflict of interest is involved in this dissemination process.

Intention to publish date

12/12/2025

Individual participant data (IPD) sharing plan

No, individual participant data (IPD) will not be made publicly available. The data collected in this study include sensitive psychological and professional information from clinical nurses. Due to ethical considerations, institutional restrictions, and the nature of consent obtained, individual-level data will not be shared beyond the research team. Only aggregated findings will be published in peer-reviewed journals.

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Other files</a>			04/07/2025	No	No
<a href="#">Other files</a>			04/07/2025	No	No