

Study Title: The Effect of Productivity Training on Perceived Job Stress and Productivity Attitudes in Nurses: A Randomized Controlled Experimental Study

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## **Study Objectives**

The primary objective of this study is to determine the effect of productivity training provided to nurses on their perceived job stress levels and productivity-related attitudes.

The specific objectives of the study are:

- To evaluate whether productivity training leads to a significant change in nurses' productivity attitudes and perceived job stress levels,
- To compare productivity attitudes and job stress levels before and after the training,
- To scientifically demonstrate the effectiveness of productivity training programs aimed at improving productivity and coping with job stress in nursing practice.
- This study aims to contribute to the limited number of experimental studies examining the relationship between job stress and productivity in nursing and to provide guidance for planning structured training programs that support nurses' professional development.

## **Study Design**

This study is a randomized controlled experimental study with a pre-test and post-test design. Participants will be randomly assigned to experimental and control groups using a computer-generated randomization program (<http://www.randomizer.org>).

## **Study Setting and Period**

The study will be conducted at Istanbul University Istanbul Faculty of Medicine Hospital following approval from the institutional ethics committee.

## **Study Population And Sample**

The study population consists of nurses working at a public university hospital located in Istanbul (N = 1080).

The sample size was calculated using G\*Power version 3.1.9.4. Based on a standardized effect size of 0.80 (Cohen's d) and a power of 0.95, the required sample size was determined as 70 nurses, with 35 participants in the experimental group and 35 in the control group.

## **Experimental Group**

Participants in the experimental group will receive a structured productivity training program lasting three weeks, with a total duration of 20 hours.

The training program includes topics such as productivity concepts in nursing, time and stress management, process improvement, teamwork, leadership, use of digital tools, and coping with job stress.

The training will be delivered using various teaching methods including lectures, case analyses, simulations, practical exercises, group work, and brainstorming sessions. The program aims to enhance nurses' cognitive, affective, and practical competencies related to productivity and stress management.

## **Control Group**

Participants in the control group will not receive any training during the study period. They will complete the same pre-test, post-test, and follow-up assessments as the experimental group.

After the completion of data collection, productivity training materials will be provided to the control group to ensure ethical fairness.

## **Outcome Measures**

### **Primary Outcome Measure**

Productivity Attitude Score:

Nurses' productivity attitudes will be assessed using the Productivity Attitude Scale. The total score obtained from the scale will be analyzed as the primary outcome measure.

Time Frame:

At baseline (before the training), immediately after completion of the three-week productivity training program, and three months after the training.

### **Secondary Outcome Measure**

Perceived Job Stress Score:

Nurses' perceived job stress levels will be assessed using the Perceived Work Stress Scale (PWSS). The total score obtained from the scale will be analyzed as the secondary outcome measure.

Time Frame:

At baseline (before the training), immediately after completion of the three-week productivity training program, and three months after the training.

## **Data Collection Procedure**

Data will be collected using the Personal Information Form, the Productivity Attitude Scale, and the Perceived Work Stress Scale. Data collection will be conducted face-to-face by the researchers after obtaining informed consent from the participants.

## **Ethical Considerations**

Ethical approval will be obtained prior to the study. Institutional permission will be secured from the hospital administration. Participation will be voluntary, and written informed consent will be obtained from all participants. Confidentiality and anonymity will be ensured throughout the study.