



(RESEARCH ARTICLE)



## A study to assess the effectiveness of planned teaching programme on knowledge regarding cognitive distortion among nursing students in selected nursing colleges: Pre -experimental study

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### Abstract

**Introduction:** To identify and address cognitive distortion, students can develop more realistic and positive thinking patterns, leading to improved well-being and coping strategies.

**Aims and Objectives:** - This study aims to assess these issues and explore their association with demographic variables.

**Research Design:** The research design selected for this study is pre-experimental I group pre-test and post-test design

**Material and Method:** Data was collected using Semi structured questionnaire on demographic variables and self-administered questionnaire on knowledge regarding Cognitive Distortion

**Result:** The study of 100 nursing students found that 73% were female, with most aged 20-21 years. A majority (70%) lived in urban areas, and 36% had a family income above Rs 40,000. Most students (67%) came from nuclear families. Leisure activities included playing games (39%), reading (16%), and using mobile phones (24%). In the pre-test, 89% of nursing students had average knowledge, 8% had good knowledge, and 3% had poor knowledge, with a mean score of  $8.69 \pm 1.51$ . In the post-test, 96% achieved excellent knowledge, and 4% had very good knowledge, with a mean score of  $22.83 \pm 1.40$ . The mean percentage of knowledge increased from 34.76% in the pre-test to 91.32% in the post-test. The effectiveness of the Planned Teaching Program was assessed using a paired t-test, with a calculated t-value of 62.17, significantly higher than the critical value at the 5% level. The mean knowledge scores showed a significant improvement, confirming the program's effectiveness. Thus, the alternative hypothesis (H1) is accepted.

**Conclusion:** This study aimed to assess the effectiveness of a planned teaching program on cognitive distortion among undergraduate nursing students. The pre-test results indicated a knowledge deficit, with an average score of 89%. Only 8% of students scored well, reflecting a need for improvement. After administering the teaching program, the post-test results showed 96% of students achieved excellent scores, significantly higher than the pre-test scores. These findings confirm that the planned teaching program effectively enhanced students' knowledge on cognitive distortion. The research hypothesis, which predicted an increase in knowledge post-program, was thus proven correct.

**Keywords:** Planned Teaching Program; Cognitive Distortion; Nursing Students, Nursing Colleges, Pre-experimental Study

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## 1. Introduction

Cognitive distortions are irrational thinking patterns that negatively affect emotions and well-being, leading to biased interpretations of reality.

Cognitive distortions are irrational thinking patterns that negatively affect emotions and well-being, leading to biased interpretations of reality. Understanding its prevalence among nursing students is crucial for addressing its impact on academic performance and mental health. By identifying and addressing cognitive distortion, students can develop more realistic and positive thinking patterns, leading to improved well-being and coping strategies.

### 1.1. Background of the study

Cognitive distortions are biased thinking patterns that can exacerbate negative emotions and reinforce poor self-perception, with 47.4% of individuals meeting severity criteria. These distortions are linked to more severe depression, lower social confidence, and increased introversion. During the COVID-19 pandemic, psychological distress was notably high, particularly among adolescents, with significant rates of depression and anxiety reported. Language patterns in depressed individuals often reflect increased self-focus and social detachment.

### 1.2. Need of the study

Cognitive distortions are irrational thought patterns that can lead to anxiety and depression, particularly affecting nursing students who often lack awareness of these distortions. These negative thinking errors, such as all-or-nothing thinking and jumping to conclusions, can harm emotional well-being and relationships. Educating nursing students about cognitive distortions is crucial to improve their mental health. The researcher aims to implement planned teaching to enhance their understanding and effectively address these issues.

### 1.3. Objectives

#### *Primary Objective*

To assess the effectiveness of the planned teaching programme on knowledge regarding cognitive distortion among nursing students

#### *Secondary Objectives*

- To assess the pre-test knowledge score regarding Cognitive distortion among Nursing students.
- To assess the post - test knowledge score regarding cognitive distortion among Nursing students.
- To assess the effectiveness of Planned Teaching Programme on knowledge regarding Cognitive distortion among Nursing students.
- To associate the post- test score with selected Demographic variables.

### 1.4. Hypothesis

H<sub>0</sub>- There is no significant knowledge among undergraduate nursing student regarding cognitive distortion.

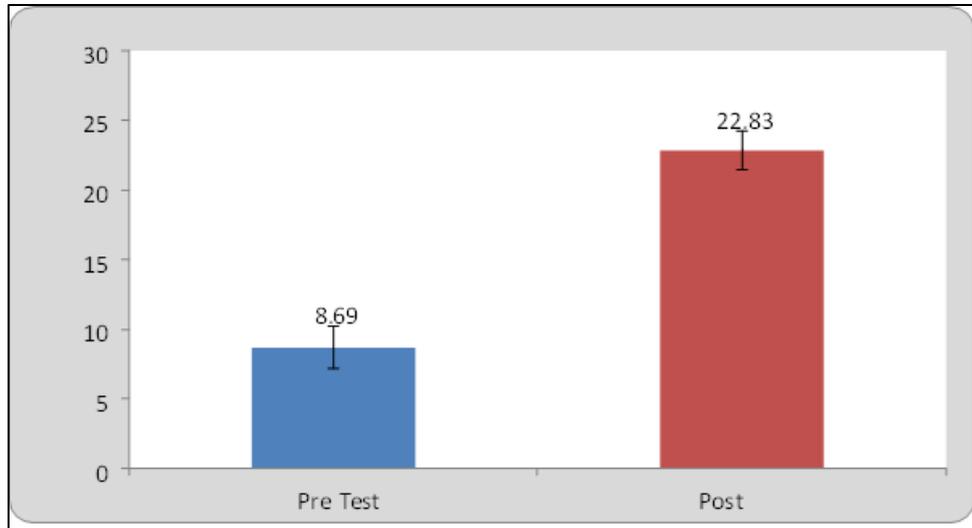
H<sub>1</sub> – There will be significant increase in the post test knowledge score among undergraduate nursing student regarding cognitive distortion.

- RESEARCH APPROCH: Quantitative research approach is used for study
- RESEARCH DESIGN: The research design selected for this study is pre-experimental I group pre-test and post-test design
- TARGET POPULATION: All Nursing Students
- ACCESSIBLE POPULATION: Nursing Students Available at the time of the Data Collection and Willing to participate
- SETTING: Selected Undergraduate Nursing Colleges
- SAMPLING: Convenient Sample Technique
- SAMPLE SIZE: 100 Nursing Students
- TOOLS: Semi structured questionnaire on demographic variables and self- administered questionnaire on knowledge regarding Cognitive Distortion

- **SETTING OF THE STUDY:** The study was conducted at Datta Meghe College of nursing Nagpur and VSPM College of nursing Nagpur.

## 2. Result

Objective3. To assess the effectiveness of Planned Teaching Programme on knowledge regarding Cognitive distortion among Nursing students.



**Figure 1** Comparison between pre test and post-test

The above graph shows the comparison between pre test and post-test. Which indicates post test knowledge score is increased significantly.

**Table 1** Comparison of pretest and post-test knowledge scores of nursing students

Test	Mean	SD	Mean Difference	t-value	p-value
Pre -Test	8.69	1.51	14.14±2.27	62.17	0.0001
Post Test	22.83	1.40			

This table shows the comparison of pretest and post-test knowledge scores of nursing students regarding Cognitive Distortion from selected nursing colleges.

Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance.

The tabulated value for n=100-1 i.e. 99 degrees of freedom was 1.98. The calculated 't' value i.e. 62.17 are much higher than the tabulated value at 5% level of significance for overall knowledge score of nursing students which is statistically acceptable level of significance.

hence it is statistically proved that the Planned Teaching Program on knowledge regarding Cognitive Distortion among undergraduate nursing students was effective. Thus, the H1 is accepted.

## 3. Conclusion

At the end of the research study researcher confirmed that There is significant difference between pre-test and post-test knowledge score regarding Cognitive Distortion among undergraduate nursing students and hence Planned Teaching Program is proved to be effective to deliver knowledge on Doom Scrolling successfully.

## **Compliance with ethical standards**

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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## **References**

- [1] <http://www.ncbi.nlm.nih.gov/7865499/>
- [2] <http://www.pubmedcentral.com>
- [3] <http://en.m.wikipedia.org>
- [4] <http://www.verywellhealth.com>
- [5] <http://pubmed.ncbi.nlm.nih.gov>
- [6] Su MR, Shum KK. The Moderating Effect of Mindfulness on the Mediated Relation Between Critical Thinking and Psychological Distress via Cognitive Distortions Among Adolescents. *Frontiers in Psychology*. 2019 Jun 26;10.
- [7] Yusoff SH, Ismail MS, Rahman NE, Ariffin MR, Don Y, Kasa MD. Family Functioning, Resilience, and Cognitive Distortion among Secondary School Students. *International Journal of Academic Research in Business and Social Sciences*. 2019 Nov;9(11):695-709.
- [8] Yazici-Çelebi G, Kaya F. Interpersonal Cognitive Distortions and Anxiety: The Mediating Role of Emotional Intelligence. *International Journal of Psychology and Educational Studies*. 2022;9(3):741-53.