

# Effect of Stress Inoculation Training to Reduce Stress among Primary School Teachers

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## ABSTRACT

**Stress Inoculation Training (SIT) is a flexible, individually tailored, multifaceted form of cognitive-behavioural therapy. Given the wide array of stressors that individuals, families and communities experience, SIT provides a set of general principles and clinical guidelines for treating distressed individuals, rather than a specific treatment formula or a set of canned interventions. The study was done among Primary Teachers with stress. The screening was done using PSS SCALE to score the level of Stress, and the level of stress was measured using WORKPLACE STRESS SCALE. Totally 30 Teachers were selected, and divided into 15 experimental groups and 15 control groups. The experimental group underwent Stress Inoculation Training for 36 sessions. The control group underwent only an Educational program about stress care. The post-test was taken by using Workplace Stress Scale in both experimental and control groups. From this study, it was concluded that Stress Inoculation Training is an effective intervention for reducing the level of stress among Primary School Teachers with stress**

**Keywords: Primary School Teachers, Stress, Stress Inoculation Training**

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## INTRODUCTION

According to Selye 1956, Stress is defined as the pressure experienced by a person in response to life demands. These demands are referred to as stressors & include a range of life Quants, Physical factors, environmental Conditions & Personal thoughts.

Developed by Psychologist Donald Moichenbaum in the 1980s, the multifaceted type of Cognitive Behavioural Therapy is designed to help individualscope with stress

Stress inoculation training improves Stress tolerance which is enhanced viacharging individuals' beliefs about their performance in stressful situations & ability to deal with distress. Promotes hope, Self-confidence, self-control & personal responsibility.

### **Aim:**

To find out the effect of Stress Inoculation Training to reduce Stressamong Primary School Teachers.

### **Objectives:**

To determine the moderate stress level among primary school teachers.

To administer a Workplace stress scale & Perceived stress scale to identifythe level of stress.

To find out the effect of Educational programs on stress care in the controlgroup.

To find out the effect of Stress Inoculation Training to reduce stress in anExperimental group

To find out the difference between the post-test of the control group and thepost-test of the experiment group.

## RESEARCH HYPOTHESIS

There will be a significant improvement in reducing stress using Stress Inoculation Training

### Research Design

Quantitative research and Quasi-experimental design.

### Sample Technique:

- A convenient sampling technique was adopted.
- **Sample size:** Totally 30 subjects have participated.
- 15 in the experimental group
- 15 in the control group
- **Sample setting:** The sample setting was among the female teachers in Sethu Baskara School

### SELECTION CRITERIA:

#### Inclusion criteria:

- The study includes only female teachers
- The study includes teachers with stress
- The study includes teachers below 25 on the Workplace stress scale.
- The study includes teachers below 26 on the Perceived stress scale.

#### Exclusion criteria:

- The study excludes teachers with other mental health issues (eg: mood disorder, anxiety, depression, etc)
- The study excludes students and other working people.
- The study excludes teachers above 26 in the Workplace Stress Scale.
- The study excludes teachers above 27 on the Perceived Stress Scale.

### Duration:

The duration of the study was 36 sessions for 3 months. Every session consists of 45 minutes to 1 hour.

### Procedure:

Totally 30 subjects were taken under inclusion criteria. The subject's stress level was measured using the Perceived Stress Scale (PSS) and Workplace Stress Scale. The therapy session was conducted in both school and home settings. The sample was divided into 15 experimental and 15 control groups. The control group underwent an awareness program about the Educational Program regarding stress care. The experimental group underwent Stress Inoculation Training. Totally 36 sessions were conducted for 3 months, and each session was held for 45 minutes to 1 hour. After the intervention program post-test was taken. The therapy was provided according to the convenient of the client. After the sessions the Workplace Stress Scale was again given, to get the post-test value used to find out the result of the study.

### Intervention Protocol

The goal of this study was to analyse the effect of stress inoculation training to reduce stress among primary school teachers. The teachers were introduced to various activities and encouraged them. Warm-up and cool-down activities lasted 10 minutes each and the intervention lasted 25 minutes. Warm-up and cool-down sessions were held every day, although with new activities each day

SIT Activities	Warm up & down Activity
Role Play	Target Activity
Journal Writing	Puzzle Fixing
Relaxation Training- Breathing Exercise	Clay Activity

Mood Tracking	Candy bowl challenge
Start a new habit	Craft Activity

**DATA ANALYSIS AND RESULT**

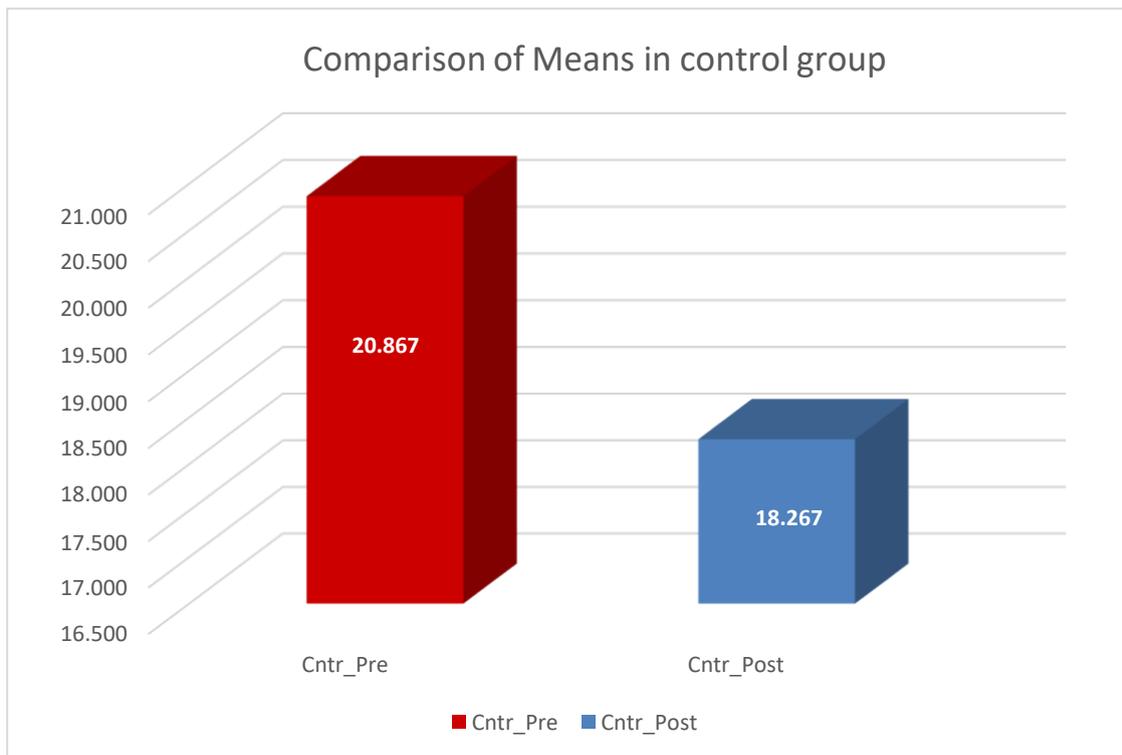
**Table no. 1. Statistical analysis of pre-test and post-test in the control group**

	Mean	N	Z value	p-value
Control Pr	20.867	15	-3.456	0.001*
Control Po	18.267	15		

\*Significant at 5% alpha level

Since the p-value of 0.001 is lesser than 0.05, an alternate hypothesis(1) is accepted.

Hence, there is a statistically significant difference between pre-test and post-test scores in the Control Group of the WPSS scale. This suggests that the intervention received by the control group had significant improvement.



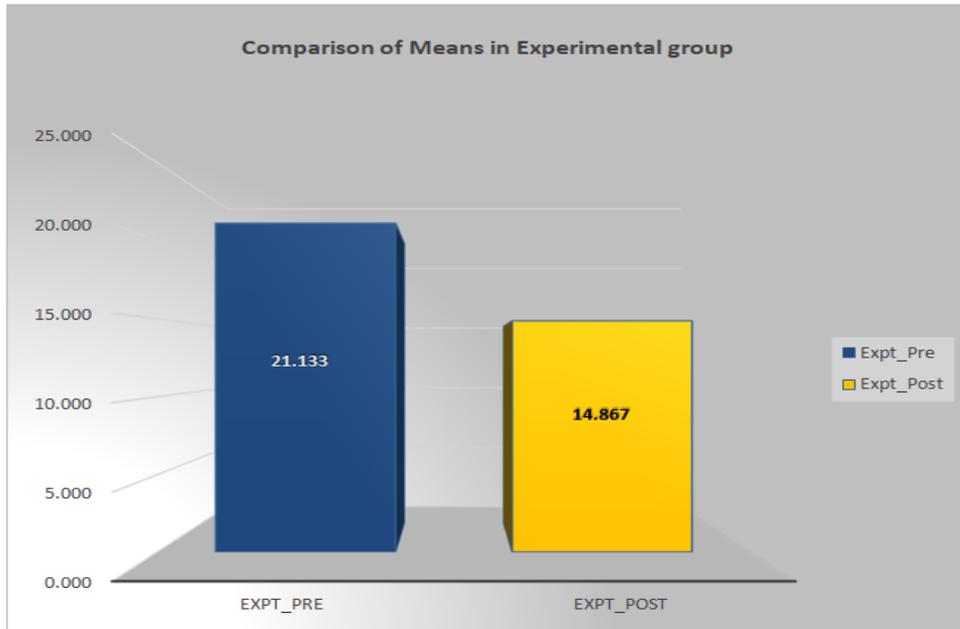
**GRAPH 1**

**Table 2 Statistical analysis of pre-test and post-test in the experimental group**

	Mean	N	Z valu	p-value
Expt_Pre	21.133	15	-3.43	0.001*
Expt_Post	14.867	15		

\* Significant at 5% alpha level

In the Experimental group, since the p-value of 0.001 is less than 0.05, an alternate hypothesis(2) is accepted. Hence, there is a statistically significant difference in the Experimental Group between pre-test and post-test scores of the WPSS scale. This suggests that the intervention received by the experimental group had significant improvement.



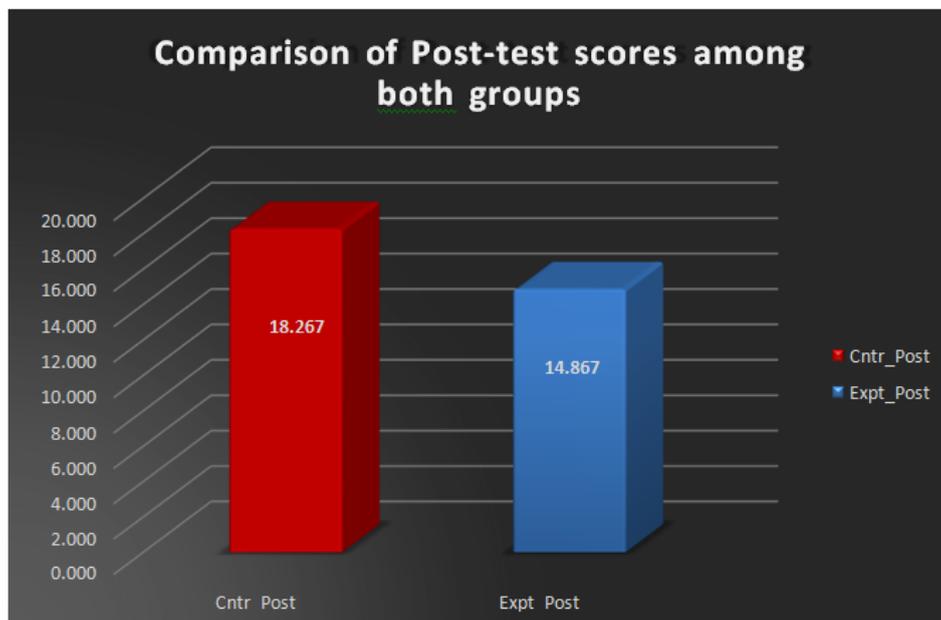
GRAPH 2

Table 3: Statistical analyses between the post-test scores of the control and experimental group

	Mean	N	Z value	p-value
Control Post	18.267	15	2.385	0.017*
Experimental Post	14.867	15		

\*Significant at 5% alpha level

Since the p-value of 0.017 is lesser than 0.05, an alternate hypothesis(3) is accepted. Hence, there is a statistically significant difference in post-test scores between the Experimental and Control Group of the WPSS scale. This suggests that the intervention received by the experimental group had more improvement when compared to the control groups.



GRAPH 3

## **DISCUSSION**

The study was conducted for a period of 36 sessions. Among the primary school teachers with stress. A total number of 30 teachers with stress were selected for the study using the screening tool PSS and they were randomly divided into an experimental group and a control group. The pre-test was done for both groups respectively using WPSS to measure the level of stress. The experimental group underwent Stress Inoculation Training intervention and the control group underwent a Stress care educational program. After the 36 sessions period of intervention, the post-test was conducted using the WPSS scale for the experimental and control group respectively and it was statistically analysed.

The TABLE-1 and GRAPH-1 were the statistical analyses of the pre-test and post-test of the control group since the p-value of 0.001 is lesser than 0.05, an alternate hypothesis (1) is accepted. Hence, there is a statistically significant difference between pre-test and post-test scores in the Control Group of the WPSS scale. This suggests that the intervention received by the control group had significant improvement. This result is supported by the previous article (R1) - Marc A. Cecil, Susan G. Forman The results indicated that stress inoculation training was effective in reducing teachers' self-reported stress, while the co-worker support group was not. However, neither treatment was successful in changing motoric manifestations of anxiety in the classroom.

The TABLE-2 and GRAPH-2 were the statistical analysis of the pre-test and post-test of the experimental group. since the p-value of 0.001 is less than 0.05, an alternate hypothesis (2) is accepted. Hence, there is a statistically significant difference in the Experimental Group between pre-test and post-test scores of the WPSS scale. This suggests that the intervention received by the experimental group had significant improvement. This result was supported by (R1)- Marc A. Cecil, Susan G. Forman The study results indicated that stress inoculation training was effective in reducing teachers' self-reported stress, while the co-worker support group was not.

The TABLE-3 and GRAPH-3 was the statistical analysis of the post-test of the control group and experimental group. Since the p-value of 0.017 is lesser than 0.05, an alternate hypothesis (3) is accepted. Hence, there is a statistically significant difference in post-test scores between the Experimental and Control

Group of the WPSS scale. This suggests that the intervention received by the experimental group had more improvement when compared to the control group. This result is supported by the previous article (R1)- Marc A. Cecil, Susan G. Forman The results indicated that stress inoculation training was effective in reducing teachers' self-reported stress, while the co worker support group was not. However, neither treatment was successful in changing motoric manifestations of anxiety in the classroom. Another supporting research by (R3)-Zsuzsanna SZABO & Mihai MARIAN This study was conducted to explore the efficacy of Stress Inoculation Training in adolescents. As the result, WPSS may be useful to teachers for stress care.

## **CONCLUSION**

The statistical result showed that there was a statistically highly significant difference between the post-test scores of the experimental group and the control group. It revealed that Stress Inoculation Training was more effective in reducing the level of stress among primary school teachers.

## **LIMITATIONS**

- Less co-operation from the teachers.
- A long-term intervention has not been provided.
- There was more destruction as it was conducted as a school-based program.

## **RECOMMENDATIONS**

- Long-term intervention can be provided.
- Stress Inoculation Training can be provided to other persons with stress.
- Stress Inoculation Training can be applied to our day to day activities in our life to reduce stress.

**Source of Funding:** Self

**Conflicting Interest:** None

**Ethics Clearance:** Approval from Institution Scientific Review Board (ISRB) was obtained prior to the study.

### REFERENCES

- [1]. Marc A. Cecil. 1990., Effects of Stress Inoculation Training and Co-worker Support Groups on Teachers' Stress, the journal of school psychology vol 28,pp 105-110
- [2]. Zsuzsanna SZABO & Mihai MARIAN., Stress Inoculation in Adolescent., Journal of Cognitive and Behavioral Psychotherapies, Vol. 12, No. 2, September 2012, 175 188.
- [3]. Dorota Żołnierczyk-Zreda, An Intervention to Reduce Work-Related Burnout in Teachers., International Journal of Occupational Safety and Ergonomics (JOSE)2005.Vol. 11, No. 4, 423-430
- [4]. A.O. Busari (PhD)., Academic Stress among Undergraduate Students: Measuring the Effects of Stress Inoculation Techniques., Mediterranean Journal of Social Sciences Vol 5 No 27 December 2014
- [5]. M. Olalekan Arikewuyo., Stress management strategies of secondary school teachers in Nigeria., Olabisi Onabanjo University, Nigeria,04 Jun 2010
- [6]. Sallie Gardner Griffith Universit., Stress Among Prospective Teachers., Australian Journal of Teacher Education Volume 35,1-1-2010
- [7]. Rachelle A. Bersamin and Flordeliza C. Posadas., stress inoculation training on state-trait anxiety of high-stress senior college student., 6th International Conference on Advances in Education 5-6 October 2020Razmizade H. Rasouli R. PhD, Sedrpooshan N. PhD.
- [8]. Effectiveness of stress inoculation training in reducing anxiety and stress in students., Journal of Behavioral Sciences Vol. 7, No. 1. Spring 2013
- [9]. Mariko KAWAHARADA, Eiji YOSHIOKA, Yasuaki SAIJO, Tomonori FUKUI, Takeji UENO and Reiko KISHI., The Effects of a Stress Inoculation Training Program for Civil Servants in Japan November 27, 2008
- [10]. Alan H.S. Chan, K. Chen, and Elaine Y.L. Chong., Work Stress of Teachers from Primary and Secondary Schools in Hong Kong..IMECS,vol III.2010
- [11]. Anthony Spirito, A.J.Finch.jr., T.L.Smith, and W.H.Cooley, Stress inoculation for anger and anxiety Journal of Clinical Child Psychology - March 1981 DOI: 10.1080/15374418109533015
- [12]. Fei Li, Jieyu Chen, Lin Yu, Yuan Jing, The Role of Stress Management in the Relationship between Purpose in Life and Self-Rated Health in Teachers.: Paul B. Tchounwou, 16 July 2016
- [13]. Bonita C. Long., Stress management for school personnel: Stress-inoculation training and exercise [https://doi.org/10.1002/1520-6807\(198807\)25:3<314::AID-PITS2310250313>3.0.CO;2-S](https://doi.org/10.1002/1520-6807(198807)25:3<314::AID-PITS2310250313>3.0.CO;2-S)
- [14]. William O'Donohue, Jane E. Fish., cognitive behavioural therapy..RC489.C63035 2003
- [15]. John W Magg., John Kotlash. Review of Stress Inoculation Training with Children and Adolescents., 1994., <https://doi.org/10.1177/01454455940184004>
- [16]. The role of occupational therapy in stress management., <https://www.linkedin.com/pulse/role-occupational-therapy-stress-management-seth-sobel>