



## A Psychological Study on Stress among Employed Women and Housewives and Its Management through Progressive Muscular Relaxation Technique (PMRT) and Mindfulness Breathing

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### Abstract

Stress is defined as “the non-specific response of the body to any demand placed upon it”. The study seeks to assess the stress level among the Employed women and house wives and its management through Progressive muscle relaxation (PMRT) and Mindfulness breathing. It made use of purposive sampling in selecting the 100 women 50 employed (working) and 50 housewives. The sample responded to the valid and reliable instrument. Sings personal stress source inventory was used to assess the level of Stress. Pre and posttest research design was used. Here the ‘t’ stat was used to calculate the significance of difference  $t=7.280$  which was significant at 0.05 level of significance. Results reveal that the stress level was high among the Employed women in comparison to house wives. Intervention sessions of Progressive muscular relaxation technique (PMRT) and mindfulness breathing were provided to the experimental group of 25 Employed women and no intervention was given to other 25 employed women i.e., control group. After the intervention posttest was taken  $t=23.778$  significant at 0.05 level of significance in Experimental group and  $t=1.685$  non-significant at 0.05 and 0.01 level of significance in control group. This determined the significant decline in the stress level of Experimental group of employed women and no decline in the control group. The stress level was reduced from moderate to low level of stress.

**Keywords:** Stress; Employed women; House wives; PMRT; Mindfulness breathing

### Introduction

Modern era is the era of science and technology where everyone is striving to excel in his/her field whether it is at home or at work place. In this modern era, stress has become a universal phenomenon. Abrol [1] discusses that every person wants more and more for the attainment of pleasure, due to this competition is increased in every field of life and this competition generates stress among people, no doubt the competition is must but we don't ignore its result in the recent years as more and more women are coming to take on many jobs. It is a general belief in many cultures that the role of women is to build and maintain the homely affairs like task of fetching water, cooking and rearing children. In the traditional society, women's role was naturally limited to the family. Since she was the bearer of children, she was fully occupied with her duties as a mother and homemaker. This was no small feat, since the traditional household may be described as both a production and a consumption unit. Man's responsibility was to provide the household with raw materials, which were then converted by the woman into consumable products or conditions by means of rudimentary methods and tools. Among the group of women, there is diversity of values. Working women have different values than non- working women and other adult women. In modern society the social and community environment is full of social and moral pollution. Hence there are many problems of working women in different fields [2].

Since the turn of the century, the status of women in India has been changing due to growing industrialization, urbanization, spatial mobility and social legislation. With the spread of education and awareness, women have shifted from kitchen to higher level of professional activities. Rapid changes in traditional values, life styles, competitiveness and industrialization are the few factors that have changed the whole environment. This change in environment has encouraged and motivated the women for search of work outside the home, which creates stress in women who handled the role of

housewife, mother and employed woman at a time. Many studies have produced evidence to indicate that women report more psychological distress than men [3].

In general, women are more likely than men to experience physical symptoms of stress, such as fatigue, irritability, headaches and depression. Women are also more likely than men to cope with job stress with unhealthy behaviors, such as poor eating habits [4,5].

Stress is difficult to define precisely. The concept of stress was first introduced in the life sciences by Selye Hans in 1936. It was derived from the Latin word ‘stringere’; it meant the experience of physical hardship, starvation, torture and pain. Selye Hans, 1936 defined stress as “the non-specific response of the body to any demand placed upon it”. Further, stress was defined as “any external event or internal drive which threatens to upset the organismic equilibrium” [6]. Another definition given by Stephen [7] stress has been stated as “a dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he/she desires and for which the outcome is perceived to be both uncertain and important.” According to Robbins and Sanghi [8] “A dynamic condition in which an individual is confronted with an opportunity, constraints, or demand related to what he or she desires and for which the outcome is perceived to be

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both uncertain and important.” Stress affects not only our physical health but our mental wellbeing, too.

## Progressive Muscle Relaxation Technique (PMRT)

Stress management programs such as meditation, yoga, hypnosis, imagery, muscle relaxation, have shown improvement in positive coping skills. Progressive muscle relaxation (PMR) technique developed by Dr. Edmund Jacobson is a technique for reduction of stress and anxiety [9]. Jacobson theorized that anxiety and stress lead to muscle tension, which, in turn, increases feelings of anxiety. When the body is in a relaxed state, however, there is little muscle tension, leading to decreased anxious feelings. Jacobson believed that if one's body is relaxed, one's mind cannot be in a state of anger. Basically, a progressive muscle relaxation exercise involves systematically constricting and relaxing various muscle groups from your feet upward or your head downward. You focus on tensing and relaxing muscle groups in the feet, legs, buttocks, stomach, back, hands, arms, chest, shoulders, neck and face. To be most effective, you should be sitting or lying down in a comfortable position. Your eyes may be opened or closed, but most people find closing their eyes helps maintain focus during the exercise. This technique is easy to learn and requires no constant guidance. Muscle tension accompanies anxiety; one can reduce anxiety by learning how to relax the muscular tension [10].

## Mindfulness breathing

The definition of mindfulness in research, training and education is evolving; the most popular definition is “paying attention in a particular way; on purpose, in the present moment, and non-judgmentally” [11]. Mindfulness training involves cultivating the ability to be aware of our current thoughts, feelings, bodily sensations with kindness and understanding. It creates a psychological ‘space’ between one's perception (e.g., stressful stimulus) and response (thoughts, speech and actions). This enables us to *respond* wisely instead of *react* impulsively with negative emotions [12]. In other words, mindfulness helps one to mobilize the inner resources to face problems openly, to be aware of and orient oneself to overcome the pressure, and propel oneself through it. It is like a sailor positioning the sail and making use of the pressure of wind to propel the boat [11]. Therefore mindfulness training is potentially useful in promoting well-being and stress management. Mindfulness breathing means bringing your attention to your breathing. Instead of letting your mind spin off into yesterday or today, take mindful breaths. Focus on your breathing, and sense the effects of breathing throughout your body [13].

Research on the benefits of deep, meditative breathing reveals immediate improved physical and mental health, in addition to the well-known benefit of physical relaxation [14-16]. This breathing promotes mindfulness, which brings our focus to the present moment without judgment. Mindfulness not only reduces stress, but can also enhance positive emotions and quality of life [17].

A large number of studies have been done to study the stress level of working women but little is done to manage this. Employed women being present in every organization form an important part of that organization as their work will affect the overall work of the organization. Therefore their stress level must be curtailed as far as possible in order to get the desired output. Progressive muscular relaxation technique and mindfulness breathing are easy to learn and are effective and economic techniques of reducing stress. Therefore these techniques should be used in every private as well as in the government organization to curtail the level of stress in order to get

the desired output. Present paper provides the empirical evidence that stress can be managed by PMRT and mindfulness breathing among employed women.

## Review of related studies

Sanlier and Arpacı [18] studied the effect of stress on women health. Results reveal that employed women in the stress scale have a higher average score than that of the non- employed women. It has been determined that total stress scores of employed women were higher as compared to non- employed women and that there was a significant difference between women's working status and total stress scores. Employed women had higher level of stress than non- Employed women.

Hashmi et al. [19] found that working married women have to face more difficulties in their lives like they experienced more stress and depression as compared to non-working married women.

Cruess et al. [20,21], Field et al. [22], found that relaxation techniques such as progressive muscle relaxation (PMR) [23], have been proven to be reliable methods in reducing self-reported stress and stress-related physiological activity in various non-pregnant clinical populations, as well as in healthy subjects.

Bastani et al. [24], Field et al. [25,26], Nickel et al. [27] and Teixeira et al. [28] studied that the immediate impact of relaxation on pregnant women indicates a reduction in experienced stress or anxiety.

Chaudhari et al. [29] studied that increase in stress levels are found in female health care professionals in the Eastern part of India due to shortage of manpower, lack of infrastructure, long emergency duty hours and inadequate remuneration for their hard work. Practicing relaxation exercises had decreased not only the stress levels but also increased the quality of their life and most important patient care.

Patel [30] revealed that in pretest most of the nurses 53.3% had moderate stress, 40.0% had mild stress and 6.7% had severe stress. In posttest most of the nurses had mild stress 73.3% and no stress 26.7%. It is concluded that Progressive Muscle Relaxation Therapy is effective in reducing the stress level of the staff nurses.

## Objectives

The main objectives of the study were stated as:

- To find out the stress level of employed women.
- To find out the stress level of unemployed women.
- To compare the stress level of employed and unemployed women.
- To see the effect of PMRT and Mindfulness breathing upon stress.
- To compare the pre and post test results of experimental and control group of employed women after intervention.

## Hypothesis

For the present study following hypothesis were formulated.

**H<sub>01</sub>**: There would be no significant difference in the mean score of stress level among Employed women and house wives.

**H<sub>02</sub>**: There would be no significant difference in the stress level of Employed women and house wives.

**H0<sub>3</sub>:** There would be no significant effect of PMRT and Mindfulness breathing upon the stress level in experimental and control group of Employed women.

## Methods

### Sample

Sample consisted of 100 educated women 50 were employed and 50 House wives (unemployed). The age of the subjects ranges from 25 to 40 years with the mean age of 34.3 for employed and 28.5 for housewives. The quota sampling method was used to select the sample.

### Description of the tool used

For the present study Singh's Personal Stress Source Inventory (SPSSI) was used to assess the level of stress among employed women and housewives. The stress scale (SPSSI) constructed and standardized by Arun Kumar Singh was used. The test comprises of 35 items and there are three given response options for each event namely, "Seldom", "sometimes", and "frequently". Higher the score, the higher is the magnitude of personal stress. Likewise, lower the score, lower is the magnitude of personal stress. The maximum scores on SPSSI is 105.

### Procedure

All the participants of the study were individually informed about the purpose of the study and were asked to complete Sing's Personal Stress Source Inventory. The scores of both the groups i.e., employed women and house wives were statistically analyzed. After the pre-test the more stressed group (employed women) were randomly divided in two equal groups of experimental and control group. The experimental group was provided with the sessions of PMRT and Mindfulness breathing twice a week for three months by the researcher. While on other days they were instructed to practice the techniques by themselves twice a day i.e., early in the morning and at bed time. The participants were provided with daily record sheets which they were required to fill up regularly and were checked twice weekly. The control group was not provided with any interventions. After three months, post-test was taken and the pre-test and post- test scores were statistically analyzed using t test to test the significance of difference between the groups.

### Statistical Analysis

The data was tabulated and analyzed using mean; SD and t test. The results of analysis are presented in Tables 1-3.

Range of Scores	Qualitative description	Employed women	Unemployed women
80 or higher	High level of stress	02=4%	0=0%
31-79	Moderate level of stress	48=96%	37=74%
0-30	Low level of stress	0=0%	13=26%
	Average	60.78	43.3

**Table 1:** It reveals that out of 50 employed women 02 falls in the high stress category, 48 in the moderate and none in the low level of stress. Similarly out of 50 unemployed 0 fall in the high stress category, 37 in the moderate and 13 in the low level of stress category.

Stress level		Employed (N=50)	Unemployed (N=50)	t	df	P
	Mean	60.78	43.3			
SD	11.957	12.051				

\* =p<0.05

**Table 2:** Employment status.

Stress level of control group		Pre-test (N=25)	Post-test (n=25)	t	df	P
	Mean	54.64	53.2			
SD	12.964	10.41				
Stress level of experimental group	Mean	66.92	29.76	23.778*	24	P<0.05 Significant
	SD	6.732	2.350			

\* =p<0.05

**Table 3:** Employed women.

## Results

Table 1 shows the Qualitative description of scores on SPSSI and among employed and un-employed women (Table 1).

Table 2 shows the Mean, SD, df and t ratio for Employed and Un-Employed women. From the Table 2, it is evident that mean of the Employed women for stress level is higher than the mean of housewives. The standard deviation in the scores of employed women is 11.957 and for housewives are 12.051. When the same scores were put to the t test the value of 7.280 was obtained which was significant at 0.05 level of significance. Here the null hypothesis was rejected which interprets that there is a significant difference in the stress level of employed women and housewives. The stress level is high in employed women in comparison to housewives.

Table 3 showing the Mean, SD, df and t ratio for the experimental and control groups after the intervention (Table 3).

From the Table 3 it is evident that the stress level among the control group of employed women before intervention (pretest) was 54.64 which were little bit higher than the post-test scores of 53.2. The SD of pretest was 12.964 and after post-test it was 10.416. When the same scores were put to t test the value of 1.685 was obtained which was lower than the table values of 2.01 and 2.68 at 0.05 and 0.01 levels of significance and was insignificant at both the levels. So the null hypothesis was accepted, which indicates that there was no significant difference in the stress level of control group in the post test.

Table 3 also reveals that the stress level of experimental group of employed women before intervention (pretest) was 66.92 which were higher than the post-test scores of 29.76. The SD of pretest was 6.732 and after post-test it was 2.350. When the same scores were put to t test we get 23.778 which were greater than the table values of 2.01 and 2.68 at 0.05 and 0.01 level of significance and were significant at both the levels of significance. So the null hypothesis was rejected. Which indicates that after the intervention of PMRT and mindfulness breathing the stress level of employed women was significantly decreased from moderate level of stress to low level of stress.

## Discussion

Nowadays stress becomes universal phenomenon. Every person wants more and more for the attainment of pleasure, due to this competition is increased in every field of life and this competition generates stress among people no doubt the competition is must but we don't ignore its result in the recent years as more and more women are coming to take on many jobs. Stress is common among the career women at workplace. In the present study it was hypothesized that there would be no significant mean difference in the stress level of employed women and house wives. Mean for the stress level of employed women was 60.78 and for house wives was 43.3 which clearly indicate that mean was higher among the employed women in comparison to house wives.

It was also hypothesized that there would be a significant difference between in the stress level of employed women and house wives. Table

1 shows the mean, standard deviation and t values for stress level of employed women and house wives. The mean for employed women was 60.78, SD=11.957 and for house wives mean was 43.3 and SD=12.051. The t value was 7.280 which were significant at 0.05 level of significance. Hence here the null hypothesis was rejected which clarifies that there is a significant difference in the stress level of employed women and house wives. The stress is higher among the employed women in comparison to house wives. Similar results were found by Hashmi et al. [19] that working married women have to face more difficulties in their lives like they experienced more stress and depression as compared to non-working married women. Sanlier and Arpacı [18] found that Employed women in the stress scale have a higher average score than that of the non- Employed women. It has been determined that total stress scores of Employed women was higher compared to non- Employed women and that there is a significant difference between women's working status and total stress scores. Employed women had higher level of stress than non- Employed women. These working women are stressed because they have to perform various roles. They have the pressure of balancing work and family. The work load cause women to be affected from stress even when women don't work outside home, they are confronted with high levels of stress. Such role of women as carrying out house hold duties, motherhood and wife cause situations as overloading or role and role conflict and may become a reason for stress [31].

It was also hypothesized that there would be no significant effect of PMRT and mindfulness breathing upon the stress level of employed women. To see the effect of PMRT and mindfulness breathing the employed women were divided into two equal groups and were labeled randomly as experimental and control group. The sessions of Progressive muscular relaxation and mindfulness breathing were given to the experimental group of employed women and not to the control group. The pretest mean scores for experimental group of employed women was 66.92, SD=6.732 and the post test scores after the intervention was mean=29.76, SD=2.350 and the t stat was 23.778 which was significant at 0.05 level of significance. Hence here the null hypothesis was rejected which signifies that there was a significant reduction in the stress level of working women after the intervention of PMRT and mindfulness breathing. The stress level was reduced from moderate to low level of stress. In the control group were no intervention sessions were provided there was no such reduction in the stress level in posttest. The mean at pretest was 54.64, SD=12.964 and post test scores was 53.2, SD=10.416 and the t stat was 1.685 which was insignificant at both the levels of 0.05 and 0.01 level of significance.

Similar results were found by Patel [30] the findings of the study revealed that in pretest most of the nurses 53.3% had moderate stress, 40.0% had mild stress and 6.7% had severe stress. In posttest most of the nurses had mild stress 73.3% and no stress 26.7%. It is concluded that Progressive Muscle Relaxation Therapy is effective in reducing the stress level of the staff nurses. Bastani et al. [24], Field et al. [25,26], Nickel et al. [27] Teixeira et al. [28], Studied that the immediate impact of relaxation on pregnant women indicates a reduction in experienced stress or anxiety. Chaudhari et al. [29] found that practicing relaxation exercises has shown to improve not only the stress levels but the quality of their life and most important patient care.

## Conclusion

To successfully manage stress in everyday lives, individual can learn to relax and enjoy life. The best way to manage stress is to prevent it. This may not be always possible. So, the next best things are to reduce stress and make life easier. For these purpose different stress management

techniques like meditation, yoga, hypnosis, guided imagery, muscle relaxation, mindfulness breathing etc. should be used. So as to curtail the stress level which is the cause of various fatal diseases like cardio vascular diseases, Hypertension etc. women being the prime victim especially employed women of stress therefore their stress management is essential both in the Govt. and private organizations.

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## References

1. Abrol KK (1990) A study of Language Strain and Coping behaviors of Teachers. *Psycholingua* 20: 173-178.
2. Muntazir M, Neharshi S, Manju P (2014) A comparative study of mental health among working women and house wives. *Indian Journal of Health and Wellbeing* 5: 1398-1400.
3. Hamilton S, Fagot BI (1988) Chronic stress and coping styles: A comparison of male and female undergraduates. *J Pers Soc Psychol* 55: 819-823.
4. American Psychological Association (2008) *Stress in America*. American Psychological Association, USA.
5. Swanson NG (2000) Working Women and Stress. *Journal of the American Women's Medical Association* 55: 76-79.
6. Selye H (1956) *The stress of life*. McGraw Hill, New York.
7. Stephen R (1999) *Organizational Behaviour* (8<sup>th</sup> edn.). Prince Hall of India, New Delhi.
8. Robbins PR, Sanghi S (2006) *Organizational Behavior* (11<sup>th</sup> edn.). Dorling Kindersley, India.
9. Sharma VK, Trakroo M, Subramaniam V, Rajajeyakumar M, Bhavanani AB, et al. (2013) Effect of fast and slow pranayama on perceived stress and cardiovascular parameters in young health-care students. *Int J Yoga* 6: 104-110.
10. Varvogli L, Darviri C (2011) Stress management techniques: Evidence-based procedures that reduce stress and promote health. *Health Sci J* 5: 74-78.
11. Kabat-Zinn J (1991) *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness*. Bantam Doubleday Dell Publishing Group, Inc, New York.
12. Phang CK, Oei TPS (2012) From Mindfulness to Meta-mindfulness: Further Integration of Meta-mindfulness Concept and Strategies into Cognitive-Behavioral Therapy. *Mindfulness* 3: 104-116.
13. Clinic Community Health centre (2010) *Stress and Stress management*. Clinic Health Community centre, Canada.
14. Jha AP, Kropfing J, Baim MJ (2007) Mindfulness training modifies subsystems of attention. *Cogn Affect Behav Neurosci* 7: 109-119.
15. Toneatto T, Nguyen L (2007) Does mindfulness meditation improve anxiety and mood symptoms? A review of the controlled research. *Can J Psychiatry* 52: 260-266.
16. Dusek JA, Hibber PL, Buczynski B, Maxwell R, John WS, et al. (2008) Long term effects of stress reduction on mortality in persons >55 years of age with systemic hypertension. *American Journal of Cardiology* 95: 1060-1064.
17. Greeson JM (2009) Mindfulness research update. *Complement Health Pract Rev* 14: 10-18.
18. Nevin S, Fatima A (2007) A study into the effects of stress on women's health. *Humanities & Social science Journal* 2: 104-109.
19. Hashami HA, Khurshid M, Hassan I (2007) Marital Adjustment, Stress and Depression among Working and non-working Married Women. *Journal of Medical Science* 2: 19-26.
20. Cruess DG, Antoni MH, Kumar M, Schneiderman N (2000) Reductions in salivary cortisol are associated with mood improvement during relaxation training among HIV-seropositive men. *J Behav Med* 23: 107-122.



21. Cruess DG, Antoni MH, McGregor BA, Kilbourn KM, Boyers AE, et al. (2000) Cognitive behavioral stress management reduces serum cortisol by enhancing benefit finding among women being treated for early stage breast cancer. *Psychosom Med* 62: 304-308.
22. Field T, Grizzle N, Scafidi F, Schanberg S (1996) Massage and relaxation therapies' effects on depressed adolescent mothers. *Adolescence* 31: 903-911.
23. Jacobson E (1938) *Progressive Relaxation*. University of Chicago Press, Chicago.
24. Bastani F, Hidarnia A, Kazemnejad A, Vafaei M, Kashanian M (2005) A randomized controlled trial of the effects of applied relaxation training on reducing anxiety and perceived stress in pregnant women. *J. Midwifery Womens Health* 50: 36-40.
25. Field T, Hernandez-Reif M, Diego M, Schanberg S, Kuhn C (2006) Stability of mood states and biochemistry across pregnancy. *Infant Behav Dev* 29: 262-267.
26. Field T, Hernandez-Reif M, Hart S, Theakston H, Schanberg S, et al. (1999) Pregnant women benefit from massage therapy. *J Psychosom Obstet Gynaecol* 20: 31-38.
27. Nickel C, Lahmann C, Muehlbacher M, Pedrosa GF, Kaplan P, et al. (2006) Pregnant women with bronchial asthma benefit from progressive muscle relaxation: a randomized, prospective, controlled trial. *Psychother Psychosom* 75: 237-243.
28. Teixeira J, Martin D, Prendiville O, Glover V (2005) The effects of acute relaxation on indices of anxiety during pregnancy. *J Psychosom Obstet Gynaecol* 26: 271-276.
29. Chaudhuri A, Ray M, Saldanha D, Bandopadhyay A (2014) Effect of progressive muscle relaxation in female health care professionals. *Ann Med Health Sci Res* 4: 791-795.
30. Patel M (2014) A study to assessment the effectiveness of Progressive Muscular relaxation therapy on the Stress among staff Nurses working in selected hospitals at Vadodra city. *IOSR Journal of Nursing and Health Sciences* 3: 34-59.
31. Klarreich SH (1990) *Work without stress. A practical guide to emotional and physical well-being on the job*. Brunner/ Mazel Int, New York.