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EFFECTIVENESS OF YOGA ON STRESS AND ANXIETY LEVEL AMONG TNEB EMPLOYEES IN SELECTED SETTINGS, TIRUVANNAMALAI.

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Abstract
A Pre experimental Study to assess the effectiveness of "yoga" on stress and anxiety level among TNEB employees. In this study a quantitative approach and pre-experimental research design was used 60 TNEB employees were selected by simple random sampling technique. Modified Stress Assessment Scale was used to assess the stress & Standardized Self rating anxiety scale was used to assess the anxiety. The computed "t" value ("t" =2.783) for stress was significant at 0.05 level of significance. The computed "t" value ("t" =1.86) for anxiety was statistically not significant at 0.05 level of significance. The YOGA was significantly effective in reducing the stress, and difference obtained in the mean anxiety score after the administration of "YOGA" was found effective in reducing the stress and anxiety level in employees.
Key words: TNEB employees, yoga, anxiety and stress.

Introduction

Work-related stress is one of the basic problems in industrial also top 10 work-related health problems and it is increasingly implicated in the development a number of problems such as cardiovascular disease, musculoskeletal diseases, early retirement to employees. On the other hand, early retirement to employees from the workplace has increased on the problems of today's industries. Hereof, improving work ability is one 24 of the most effective ways to enhance the ability and preventing disability and early retirement. Workplace stress is the harmful physical and emotional responses that can happen when there is a conflict between job demands on the employee and the amount of control an employee has over meeting these demands. In general, the combination of high demands in a job and a low amount of control over the situation can lead to stress. Stress in the workplace can have many origins or come from one single event. It can impact on both employees and employers alike

According to, three broad perspectives can be chosen when studying stress: (a) the response-based perspective, (b) the stimulus-based perspective, and (c) the cognitive transactional process perspective Occupational stress, hence, is found to be a mental and physical condition that calls in a detrimental effect on the individual's productivity, effectiveness, personal health and quality of work. Job stress is more strongly associated with health complaints than financial or family problems. 80% of workers feel stress on the job, nearly half say they need help in learning how to manage stress. And 42% say their co-workers' need such help; 14% of respondents had felt like striking a co-worker in the past year, but didn't 't; 25% have felt like screaming or shouting because of job stress, 10% are concerned about an individual at work they fear could become violent; 9% are aware of an assault or violent act in their workplace. And 18% had experienced some sort of threat or verbal intimidation in the past year 65% of workers said that workplace stress had caused difficulties and more than 10 percent described these as having major effects.

Nearly10% said they work in an atmosphere where physical violence has occurred because of job stress and in this group, 42% report that yelling and other verbal abuse is common; 29% had yelled at co-workers because of workplace stress, 14% said they work where machinery or equipment has been damaged because of workplace rage and 2% admitted that they had actually personally struck someone; 19% or almost one in five respondents had quit a previous position because of job stress and nearly one in four have been driven to tears because of workplace stress.14 27 62% routinely find that they end the day with work-related neck pain.

Objectives of the study

1)To assess and evaluate the level of stress among TNEB employees before and after the administration of "YOGA".

2) To assess and evaluate the level of anxiety among TNEB employees before and after the administration of "YOGA".

3) To determine the association between pre-test stress score with selected personal variables.

4) To determine the association between pre-test anxiety score with selected personal variables.

5) To find out the association between post-test stress score with selected personal variables.

6) To find out the association between post-test anxiety score with selected personal variables.

Methods and Materials

Quantitative research approach and pre-experimental research design was used in this study.

The Population was All the employees working in TNEB.The Sample was Employees who fulfil inclusion criteria and working in TANGEDCO in selected setting Tiruvannamalai district. The sample size was 60.Sampling Technique used Simple random sampling technique.

Data Collection Tools and Technique

S.No	Tools	Purpose	Data Collection Technique
1	Selected Personal Variables	To assess the personal information of TNEB employees	Paper and Pencil
2	Modified Stress Assessment Scale	To assess the stress level of TNEB employees.	
3	Standardized Zung self-rating anxiety scale	To assess the anxiety level of TNEB employees	

Name of the Tool	Method	Reliability
Zung self-rating scale	Karl Pearson Correlation Coefficient	.80
Modified Stress Assessment Scale	Test Re-test	.906

Results:

Table 1: Frequency and Percentage Distribution of Selected Personal Variables of TNEB employees

Personal Variable	Categories	Frequency (f)	Percentage (%)
Age	30-40 41-50 51-60	35 20 5	67.6 27 5.4
Sex	Male	60	100
Education	10^{th} and 12^{th} Graduation PG	30 27 3	62.1 29.7 8.1
Religion	Hindu Christian Muslim Others	36 0 24 0	97.3 0 2.7 0
Place of residence	Urban Rural	29 31	40.5 59.5

Type of Family	Nuclear Joint	32 28	59.5 40.5
Family income/ Month	Below 20 K 21-40K 41-60k More than 60k	22 24 12 2	32.4 45.9 18.9 2.7
History of stress disorder	YES NO	4 56	2.7 97.3
History of anxiety disorder	NO	60	100
Previous exposure to yoga	YES NO	11 49	29.7 70.3

Table 2: Findings Related to Level of Stress of Students Before and After the Administration of "YOGA"

Categories	**Pre-Test**		**Post-Test**	
Stress	**Frequency (f)**	**Percentage (%)**	**Frequency (f)**	**Percentage (%)**
Mild	46	70.3	48	78.4
Moderate	13	27	12	21.6
Severe	01	2.7	0	0.0

Findings Related to Level of Stress of Students Before and After the Administration of "YOGA"

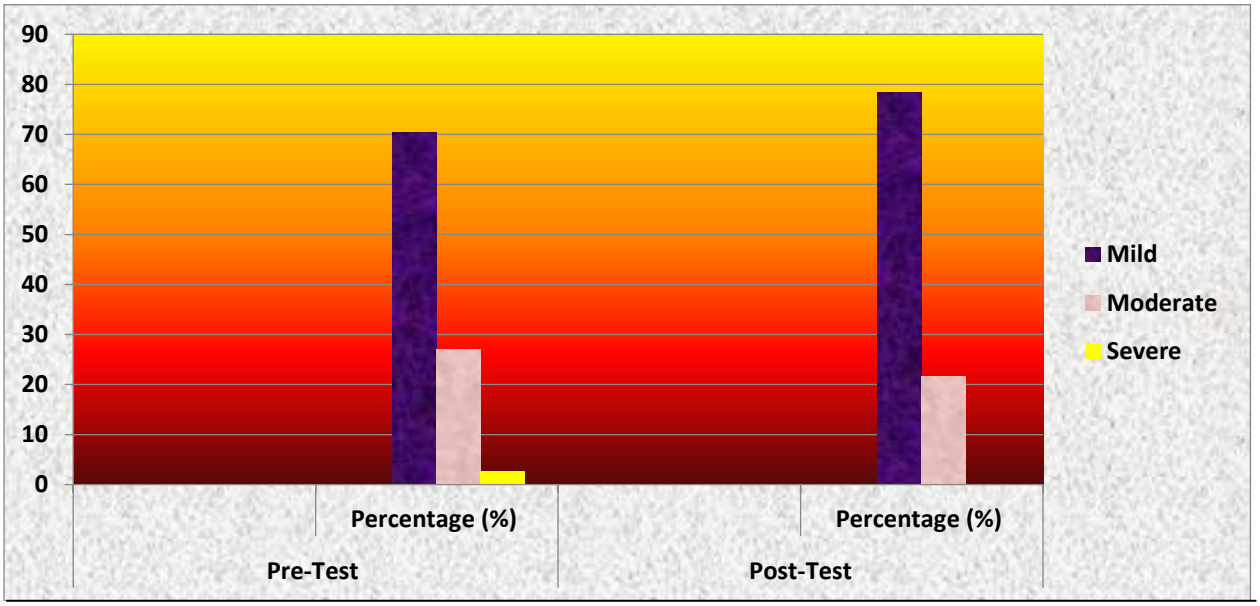

Table 3: Findings Related to Effectiveness of "YOGA" on Stress Level

Paired t-Test	**Mean**	**SD**	**Mean Difference**	**d.f**	**t-test Value**	**p- Value**

Pre-Test Stress score	44.81	12.76+2.09	27.83	36	2.158	0.038*
Post-Test Stress score	42.02	10.84+1.78				

Table 4: Findings Related to Anxiety Level of TNEB employees before and After the Administration of "YOGA"

Categories	**Pre-Test**		**Post-Test**	
	Frequency (f)	**Percentage (%)**	**Frequency (f)**	**Percentage (%)**
Normal Range Anxiety	44	73	49	81.1
Mild to Moderate Anxiety	16	27	11	18.9
Marked Severe Anxiety	0	0	0	0
Extreme Anxiety	0	0	0	0

Table 5: Findings Related to Effectiveness of "YOGA" on Anxiety Level

Paired t-Test	**Mean**	**SD**	**Mean Difference**	**df**	**t-test Value**	**p- Value**
Pre-Test Stress score	39.37	8.96+1.47	2.05	36	1.86	.071NS
Post-Test Stress score	37.32	10.84+1.78				

Table 6: Fisher's Exact Value Showing Association of Pre-test Stress Score with Selected Personal Variables

Personal Variable	**Categories**	**Normal Range**	**Mild Moderate**	**Severe**	**Fisher's Exact**	**d.f**	**p-value**
Age	30-40 41-50 51-60	18 17 1	6 3 1	1 0 0	.426	2	1.00 NS
Sex	Male	26	10	1	…	…	…

Education	10th and 12th Graduation PG	8 10 6	1 4 4	0 0 1	4.438	3	.198NS
Religion	Hindu Muslim	25 1	10 0	1 0	.284	1	1.00Ns
Place of residence	Urban Rural	15 11	6 4	1 0	.379	1	.690NS
Type of Family	Nuclear Joint	17 9	5 5	0 1	.379	1	.690NS
Family income/ Month	Below 20 K 21-40K 41-60k More than 60k	8 12 6 0	4 4 1 1	0 1 0 0	4.760	3	.173NS
History of stress disorder	YES NO	0 26	1 9	0 1	3.726	1	.216 NS
History of anxiety disorder	NO	26	10	0	…	…	…
Previous exposure to yoga	YES NO	7 19	3 7	1 0	.295	1	.672NS

NS (P>0.05), Not significant at 0.05 level of significance

Table 7: Fisher's Exact Value Showing Association of Pre-test Anxiety Score with Selected Personal Variables

Personal Variable	**Categories**	**Normal Range**	**Mild Moderate**	**Fisher's Exact**	**df**	**p-value**
Age	30-40 41-50 51-60	1 10 2	6 3 1	6.305	2	0.033NS
Sex	Male	27	10	…	…	…

Education	10th and 12th Graduation PG	7 10 8	2 4 3	.578	3	1.00Ns
Religion	Hindu Muslim	26 1	10 0	.381	1	1.00Ns
Place of residence	Urban Rural	15 12	7 3	.632	1	.690NS
Type of Family	Nuclear Joint	17 10	5 5	.509	1	.708 NS
Family income/ Month	Below 20 K 21-40K 41-60k More than 60k	9 12 5 1	3 5 2 0	.704	3	1.00Ns
History of stress disorder	YES NO	0 27	1 9	2.775	1	.270 NS
History of anxiety disorder	NO	27	10	…	…	…
Previous exposure to yoga	YES NO	5 22	6 4	6.010	1	.022*

(P<0.05), * Significant at 0.05 level of significance, NS (P>0.05) Not Significant

Table 8: Fisher's Exact Value Showing Association of Post-test Stress Score with Selected Personal Variables

Personal Variable	Categories	Normal Range	Mild Moderate	Severe	Fisher's Exact	df	p-value
Age	30-40 41-50 51-60	19 8 2	6 2 0	0 0 0	.426	2	1.00 NS

Sex	Male	29	8	0	…	…	…
Education	10th and 12th Graduation PG	9 11 7	0 3 4	0 0 0	4.438	3	.198NS
Religion	Hindu Muslim	28 8	8 0	0 0	.284	1	1.00Ns
Place of residence	Urban Rural	11 18	4 4	0 0	.379	1	.690NS
Type of Family	Nuclear Joint	18 11	4 4	0 0	.379	1	.690NS
Family income/ Month	Below 20 K 21-40K 41-60k More than 60k	9 13 7 0	3 4 0 1	0 0 0 0	4.760	3	.173NS
History of stress disorder	YES NO	0 29	1 7	0 0	3.726	1	.216 NS
History of anxiety disorder	NO	29	8	0	…	…	…
Previous exposure to yoga	YES NO	8 21	3 5	0 0	.295	1	.672NS

NS (P>0.05) Not significant at 0.05 level of significance

Table 9: Fisher's Exact Value Showing Association of Post-test Anxiety Score with Selected Personal Variables

Personal Variable	**Categories**	**Normal Range**	**Mild Moderate**	**Fisher's Exact**	**df**	**p-value**
Age	30-40 41-50 51-60	20 8 2	5 2 0	.390	2	1.00Ns
Sex	Male	30	7	…	…	…
Education	10th and 12th Graduation PG	9 10 9	0 4 2	3.654	3	.284 NS

Religion	Hindu Muslim	29 1	7 0	.240	1	1.00Ns
Place of residence	Urban Rural	13 17	2 5	.513	1	.677NS
Type of Family	Nuclear Joint	18 12	4 3	.019	1	1.00Ns
Family income/ Month	Below 20 K 21-40K 41-60k More than 60k	10 14 6 0	2 3 1 1	3.437	3	.361 NS
History of stress disorder	YES NO	1 29	0 7	0.240	1	.1.00Ns
History of anxiety disorder	NO	30	7	…	…	…
Previous exposure to yoga	YES NO	6 24	5 2	7.186	1	0.016*

(P<0.05), *significant at 0.05 level of significance, NS (P>0.05) Not significant

Discussion

Similar study was conducted on effect of "YOGA" on anxiety among nursing students. It was found that "YOGA" was effective in reducing anxiety among nursing students as the calculated „t" value was 16.7 and 11.7 and p value < 0.0001 being less than 0.05 level of significance in psychological and physiological aspects respectively by **Suchismita Pahantasingh, et. al. (2017).**

Conclusion

The administration of „YOGA" was significantly effective in reducing the stress level of B.Sc. Nursing first year students at the level of 0.05 significance, and difference obtained in the mean anxiety score before and after the administration of "YOGA" was effective in reducing the anxiety level of B.Sc. Nursing first year students but not significance at 0.05 level of significance.

Limitation

The study was confined to a small no. of students (37) participating in the study. This limits the generalization of the findings.

Recommendations

- A longitudinal study can be conducted by administering „YOGA" over a period of 3-6 months and there after result can be noted.
- An experimental study can be conducted to evaluate the impact of „YOGA" on physiological parameter of patients.
- An experimental study can be conducted to evaluate the impact of „YOGA" on psychosomatic disorders (Insomnia, drug addiction, asthma etc.) of patients.
- An experimental study can be conducted to evaluate the impact of „YOGA" on cardio-vascular stress response.
- A comparative study can be conducted with other methods of relaxation.

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