CHANGES OBSERVED ON STRESS AFTER TWELVE WEEKS OF PRANAYAMA PRACTICES AMONG COLLEGE WOMEN

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ABSTRACT

The purpose of the study was designed to examine the effect of pranayama practices on stress of college women students. For the purpose of the study, thirty women students from various Departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of the fifteen subjects. Group I underwent pranayama practices for five days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular programme. The following variable namely stress was selected as criterion variable. All the subjects of two groups were tested on selected dependent variable at prior to and immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference among pranayama practices group and control group on stress. And also the results of the study showed that there was a significant reduction on stress due to twelve weeks of pranayama practices.

KEYWORDS:

PRANAYAMA PRACTICES, STRESS, ANCOVA, COLLEGE WOMEN

INTRODUCTION

One of the most common symptoms of stress, anxiety and depression is irritability and aggressiveness. Aggression is particularly hard to overcome for many people with anxiety related depression, no matter how sincerely they try to master anger management techniques. Recent experiments in mice may help to explain why irritability and aggression can be so hard to beat for these people. There appears to be a particularly rapid feedback between the usual fight or flight hormonal stress hormones and the brain's aggressive processes. Researchers publishing in behavioural neuroscience found that stimulating hypothalamic attack centers in the brains of rats stimulated more stress hormones. They also found that higher levels of the same hormones led to higher level of aggression. The research also revealed that rats will attack if their hypothalamic attacks centers are stimulated-even if there is no other rat present. That helps explain why some human individuals can become aggressive, even if there is no one else physically present. Not only do leaved stress hormones push the aggression centers of the brain to kick start more rapidly than they would otherwise, but overuse of the brains aggression centers seems to actually train the brain to responds more easily with aggression. If this feedback loops work in rats, it's a good bet it works in humans as well. The bottom line: stress and aggression work together in one very rapid feedback loop.

METHODOLOGY

The purpose of the study was designed to examine the effect of pranayama practices on stress of college women students. For the purpose of the study, thirty women students from various Departments at Annamalai University were selected as subjects. They were divided randomly into two equal groups. Each group consisted of the fifteen subjects. Group I underwent pranayama practices for five days per week for twelve weeks. Group II acted as control who did not undergo any special training programme apart from their regular programme. The following variable namely stress was selected as criterion variable. All the subjects of two groups were tested on selected dependent variable at prior to and

immediately after the training programme. The analysis of covariance [ANCOVA] was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the 'F' ratio obtained by the analysis of covariance, which was considered as an appropriate.

ANALYSIS OF THE DATA

Stress

The analysis of covariance on stress of the pre and post test scores of pranayama practices group and control group have been analyzed and presented in Table I.

TABLE I

ANALYSIS OF COVARIANCE OF THE DATA ON STRESS OF PRE AND POST TESTS SCORES OF PRANAYAMA PRACTICES AND CONTROL GROUPS

Test	Pranayama practices group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	20.67	20.93	Between	0.53	1	0.53	0.34
S.D.	1.19	0.91	Within	44.27	28	1.58	
Post Test							
Mean	17.80	20.87	Between	70.53	1	70.53	18.17*
S.D.	1.24	1.24	Within	108.67	28	3.88	
Adjusted Post Test							
Mean	17.87	20.79	Between	63.31	1	63.31	67.66*
			Within	25.27	27	0.94	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 2 and 28 and 2 and 27 are 3.34 and 3.35 respectively).

The table I shows that the pre-test means of pranayama practices group and control group on stress are 20.67 and 20.93 respectively. The obtained "F" ratio of 0.34 for adjusted post-test means is less than the table

value of 3.34 for df 1 and 28 required for significance at .05 level of confidence on stress.

The post-test means of pranayama practices group and control group on stress are 17.80 and 20.87 respectively. The obtained "F" ratio of 18.17 for adjusted post-test means is more than the table value of 3.34 for df 1 and 28 required for significance at .05 level of confidence on stress.

The table I further shows that the adjusted post-test means of pranayama practices group and control group on stress are 17.87 and 20.79 respectively. The obtained "F" ratio of 67.66 for adjusted post-test means is more than the table value of 3.35 for df 1 and 27 required for significance at .05 level of confidence on stress.

The results of the study indicated that there was a significant difference between the adjusted post-test means of pranayama practices group and control group on stress.

CONCLUSIONS

1. There was a significant difference between pranayama practices group and control group on stress.

2. And also it was found that there was a significant reduction on selected criterion variable such as stress due to pranayama practices.

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