Effect of yogic breathing on mood state in hypo kinetic women

R. KANTHANATHAN

Received 25 November 2020; Accepted 27 January 2021

Abstract: Effect of yogic breathing on mood state in hypo kinetic women was examined. Sixty hypo kinetic women from Thalassery, Kannur District, Kerala aged between 40 to 50 years were selected as subjects randomly. The subjects were equally divided into control group and experimental group. Yogic breathing was assigned for twelve weeks to the experimental group. The control group was not allowed to participate in the training. To all the subjects a pre-test and a post-test on mood state were collected through a questionnaire developed by Terry. The data collected from the subjects was statistically analyzed with ‘t’ ratio to find out the significant difference among experimental and control group on mood state. The analysis reveals that the yogic breathing programme significantly improved the mood state of hypo kinetic women.

Keywords: Yogic breathing, Mood state, Hypo kinetic

* Assistant Professor, Department of Physical Education, College of Veterinary and Animal Sciences, Pookode, Waynad, Kerala. kanthanathan@kvasu.ac.in
1. Introduction

Participation in physical activity is not a regular component of those individuals who are predominantly sedentary. These individuals constitute the largest segment of our society. They are at the greatest risk for developing hypo kinetic diseases. Examples of hypo kinetic diseases include cardiovascular disease, obesity, diabetes, stroke, and some forms of cancer.

Hypo kinetic is a term used to denote a type of lifestyle with no or irregular physical activity. A person who lives a sedentary lifestyle may know as a hypo kinetic person. It is commonly found in both the developed and developing world. Sedentary activities include sitting, reading, watching television and computer use for much of the day with little or no physical activity. They are at the greatest risk for developing hypo kinetic diseases. Examples of hypo kinetic diseases include cardiovascular disease, obesity, diabetes and stroke. More than half of the women (approximately 60% in 1988) are not physically active on a regular basis. Sedentary individuals are twice as likely to develop coronary heart disease as people who engage in regular physical activity.

The control of breath is called pranayama in Sanskrit. The word pranayama is a compound word which consists of prana and ayama. Prana means life force, or the vital energy, or that forced by which we have our life. Ayama means control, i.e., control of breath. That is the literal meaning. (Abhedananda, 1999)

The classical text on hatha yoga is the hatha yoga pradipika, which describes the various asanas and breathing exercises which form the basis of the modern practice of yoga (LucyLidell et al. 1983).

Mood state refers to a person’s experience of emotion, the way the person feels ‘inside’. Some examples of emotions are depression, elation, anger and anxiety.

Eri et al. (2002) assessed mood status in male and female before and after yoga practice and reported that yoga practice showed lower scores of negative mood scale and higher scores of positive mood scale of MMS (Multiple Mood Scale). Hence it was proposed to find out the effect of 12 weeks of yogic breathing on mood state in hypo kinetic women.

1.2. Hypothesis

It was hypothesized that 12 weeks of yogic breathing would significantly improve the mood state of hypo kinetic women.

2. Materials And Methods

2.1 Participants

This study is designed to determine the effects of 12 weeks of yogic breathing on mood state in hypo kinetic women. The subjects of the study were sixty hypo kinetic women from Thalassery, Kannur
District, Kerala. These subjects were randomly assigned to two groups that is an experimental group and a control group. Each group consists with thirty subjects. The experimental group had undergone yogic breathing programme for a period of 12 weeks. Sectional breathing, kapalapathi, anuloma, viloma, nadi suddhi, surya bedana and chandra bedana were practiced by the experimental group. Intensity of the pranayama increased after every two weeks by increasing rounds. The control group did not involve in any training programme.

2.2 Research Design

Before and after the yogic breathing programme mood state was assessed by by the administration of Brunel mood scale (BRUMS) developed by Terry, et al., (1992) for both the groups. It consists of 24 words that describe feelings. These 24 items comprise of six subscales. The total score for Mood is the sum of the subscale scores. Lower the scores the highest would be the level of mood and vice versa. The collected data were statistically analyzed by ‘t’ ratio. 0.05 level of confidence was fixed to test the level of significance.

3. Results

The data was collected before and after the training period for both control and experimental groups on mood state. The data was statistically analyzed by ‘t’ ratio. The level of significance was fixed at 0.05 level of confidence.

Table – 1 Computation of ‘t’ ratio on mood state of experimental group and control group

<table>
<thead>
<tr>
<th>Groups</th>
<th>Pre-test mean</th>
<th>Post-test mean</th>
<th>Mean difference</th>
<th>Standard error</th>
<th>‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>62.60</td>
<td>56.30</td>
<td>6.3</td>
<td>0.976</td>
<td>6.45*</td>
</tr>
<tr>
<td>Control</td>
<td>62.05</td>
<td>61.75</td>
<td>0.3</td>
<td>0.309</td>
<td>0.97</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level for the degrees of freedom 1 and 29, 2.045

Table shows that the ‘t’ ratio on mood state of experimental group was 6.45. Since the value was higher than the required table value of 2.045, it was found to be statistically significant at 0.05 level of confidence for degrees of freedom 1 and 29. And the obtained ‘t’ ratio between pre and post test of control group 0.97 was lesser than the required table value of 2.045, found to be not statistically significant.

This significant change may be due to the effect of 12 weeks of yogic breathing on experimental group. The results of this study indicate that there was a significant improvement in mood state of the hypo kinetic women (experimental group) after 12 weeks of yogic breathing programme. So the hypothesis is accepted.
The results of this study indicate that there was a significant improvement in mood state of the subjects (experimental group) after twelve weeks of yogic breathing programme. The above finding of the present study is in agreement with the studies conducted by Lavey et al. (2005), Parshad (2004) and Streeter et al. (2010).

Figure 1. Bar diagram showing the mean values of mood state for experimental and control groups.

4. Conclusion
With the limitation of the study, the following conclusion is drawn.
Results of the study showed that yogic breathing programme significantly improved the mood state of hypo kinetic women.

References