EFFECT OF CHAIR YOGA AND PHYSICAL EXERCISES ON WORKING WOMEN SUFFERING FROM STRESS AND LOW BLOOD PRESSURE

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ABSTRACT

The purpose of the study was to find out the effects of Chair Yoga and Physical Exercises on working women suffering from Low Blood Pressure. For this study 300 working women from Noida district of U.P. has been selected as subject at random for this study and their age was between 18-45 years. The selected groups were separated into two experimental groups and a control group. In the Experimental Group I (Chair Yoga Practice Group), Experimental Group II (Physical Exercises Practice Group). In the study, two different training approaches were adopted as independent variables, i.e., specific Yogasana Practice while sitting on a Chair and selected Physical Exercises. The Low Blood Pressure was chosen as a criterion variable. It was measured in millimetres of mercury (mmHg) with the help of a Sphygmomanometer. The result revealed that Low Blood Pressure level improved significantly over the eight weeks training period for Chair Yoga Practice and Physical Exercise among working women of Noida.

Keywords: Chair Yoga, Physical Exercises, Low Blood Pressure
1. INTRODUCTION

Man has made tremendous progress in almost every walk of the life. Modern scientists and researchers have absolutely changed the life style. However, pollution of air, water, body and mind is also the result of science. Longing for material wealth has hardened. The hearts of human beings, Human values are declining. Stress and strain are the causes of physical as well as mental distraction. Yoga has the surest remedies for man’s physical as well as psychological ailments. It makes the organs of the body active in their functioning and has good effect on internal functioning of the human body.

Those women going for working in offices, they are having a lot of pressure from their superior as well as from their families. There life is so busy that they are unable to take care of their physical fitness. When they are new in the work place at that time it didn’t affect their health immediately by like slow poison, so many diseases surround them and normally it is seen Survival Pain, Lower Back Pain and Stress. The women those who used to for regular exercise they have less chance of suffering from such disease which is happening due to their working conditions.

2. METHODOLOGY

300 working women from Noida district of U.P. has been selected as subject at random for this study and their age was between 18-45 years. The selected groups were separated into two experimental groups and a control group. In the Experimental Group I (Chair Yoga Practice Group), Experimental Group II (Physical Exercises Practice Group). In the study, two different training approaches were adopted as independent variables, i.e., specific Yogasana Practice while sitting on a Chair and selected Physical Exercises. The Low Blood Pressure was chosen as a criterion variable. It was measured in millimetres of mercury (mmHg) with the help of a Sphygmomanometer.

3. RESULTS

The following tables illustrate the statistical results of the Effects of Chair Yoga Practices and Physical Exercises on Low Blood Pressure of working women of Noida.

### TABLE I

**ANALYSIS OF COVARIANCE FOR THE PRE TEST AND POST TEST DATA OF EXPERIMENTAL GROUP I, EXPERIMENTAL GROUP II AND CONTROL GROUP ON LOW BLOOD PRESSURE (Scores in mm of Hg)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Exp. Group I</th>
<th>Exp. Group II</th>
<th>Control Group</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>Degree of freedom</th>
<th>Mean Squares</th>
<th>Obtained 'F' ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test mean</td>
<td>104.72</td>
<td>106.45</td>
<td>116.13</td>
<td>B</td>
<td>7562.780</td>
<td>2</td>
<td>3781.390</td>
<td>60.095*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>18688.220</td>
<td>297</td>
<td>62.923</td>
<td></td>
</tr>
<tr>
<td>Post-test Mean</td>
<td>106.52</td>
<td>109.04</td>
<td>116.01</td>
<td>B</td>
<td>4833.047</td>
<td>2</td>
<td>2416.523</td>
<td>67.177*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>10683.790</td>
<td>297</td>
<td>35.972</td>
<td></td>
</tr>
<tr>
<td>Adjusted Post-Test Mean</td>
<td>107.69</td>
<td>109.75</td>
<td>114.14</td>
<td>B</td>
<td>6160.976</td>
<td>3</td>
<td>2053.659</td>
<td>64.973</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>9355.861</td>
<td>296</td>
<td>31.608</td>
<td></td>
</tr>
</tbody>
</table>

* Significant, F (2, 297) = 3.04 and F (2, 296) = 3.04

Table I shows the pre-test means of Experimental Group I, Experimental Group II and Control Group was 104.72, 106.45 and 116.13 respectively. Since the obtained 'F' ratio 60.095 was greater than the table value 3.04, there was significant difference.
among the pre-test means at 0.05 level of confidence with 2 and 297 degrees of freedom.

The post-test means of Experimental Group I, Experimental Group II and Control Group were 106.52, 109.04 and 1116.01 respectively. The table value required for significance at 0.05 level was 3.04. Since the obtained 'F' ratio 67.177 was greater than the table value of 3.04 it indicates that there was significant difference among the post-test means at 0.05 level of confidence with 2 and 297 degrees of freedom.

The adjusted post-test means of Experimental Group I, Experimental Group II and Control Group were 107.69, 109.75 and 114.14 respectively. The table value required for significance at 0.05 level was 3.04. Since the obtained 'F' ratio 64.973 was greater than the table value of 3.04 which indicates that there was significant difference among the adjusted post-test means at 0.05 level of confidence with 3 and 296 degrees of freedom. Hence the Scheffe’s post-hoc test was applied to find out the significance of ordered adjusted final mean differences among the groups.

### TABLE I (A)

**SCHEFFE’S POST HOC TEST MEAN DIFFERENCE OF EXPERIMENTAL GROUP I, EXPERIMENTAL GROUP II AND CONTROL GROUP ON LOW BLOOD PRESSURE**

(Scores in mm of Hg)

<table>
<thead>
<tr>
<th>Experimental Group I</th>
<th>Experimental Group II</th>
<th>Control Group</th>
<th>Mean Difference</th>
<th>Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>107.69</td>
<td>109.75</td>
<td>-</td>
<td>2.06*</td>
<td>1.27</td>
</tr>
<tr>
<td>107.69</td>
<td>-</td>
<td>114.14</td>
<td>6.45*</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>109.75</td>
<td>114.14</td>
<td>4.39*</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 Level

Table I (A) shows the Scheffe's Post Hoc test results. The ordered adjusted final mean difference for Low Blood Pressure of Experimental Group I, II and Control Group were tested for significance at 0.05 Level of Confidence against Confidence Interval Value. The mean differences between Experimental Group I and Experimental Group II, Experimental Group I and Control Group and Experimental Group II and Control Group was 2.06, 6.45 and 4.39 respectively. The obtained Mean Differences of these groups was greater than the Confidence Interval Value 1.27 which shows that the comparisons were significant.
1.4 DISCUSSION

After analyzing the results, the researcher has found that there were significant differences among the experimental and control groups and there was significant improvement in between the experimental groups on Low Blood Pressure. The Chair Yoga Practices Group pre test and post test mean value observations was 104.72 and 106.52. The Physical Exercises Practices Group pre test and post test mean value observations was 106.45 and 109.04.

The results of the present study clearly indicate that Low Blood Pressure level improved significantly over the eight weeks training period for Chair Yoga Practice and Physical Exercise. However, the differences among the two experimental groups were significant. The Chair Yoga Practices Group produces greater improvement than the Physical Exercises Group and Control Group. However, the least improvement was noticed on Physical Exercises Group. The control group did not produce any significant improvement.

1.5 CONCLUSION

It was concluded from the findings of the study that Low Blood Pressure level improved significantly over the eight weeks training period for Chair Yoga Practice and Physical Exercise. However, the differences among the two experimental groups were significant. The Chair Yoga Practices Group produces greater improvement than the Physical Exercises Group and Control Group. However, the least improvement was noticed on Physical Exercises Group. The control group did not produce any significant improvement.

REFERENCES