Effect of kayakalpa with deer exercise and suryanamaskaram on abdomen strength among college girls

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Abstract

Purpose: This study was piloted to understand the effects of Kaya Kalpa with Deer Exercise and Suryanamaskaram for the college students on abdomen strength.

Methodology: For the study, 60 college girls in and around Coimbatore were selected as subjects. The age of the subject is from 18 to 23 years. The subjects have been divided into three groups each involving of 20 members. The Experimental Group I went on Kaya Kalpa and Deer Exercise; The Experimental Group II went on only Suryanamaskaram for 10 weeks. The Control Group were not given any practices or exercise.

Results: The study showed a substantial improvement in the abdomen strength of the Experimental Groups I, II subjects than the Control group. Through the kaya Kalpa and Deer Exercise practice has improved the abdomen strength a lot in the college girls.

Conclusion: It has been recognized that Kaya Kalpa and Deer Exercise helps in improving the abdomen strength and reduce mensural problems.

Keywords: Kaya kalpa, deer exercise, suryanamaskaram, abdomen strength

Introduction

Yoga is a priceless gift of ancient Indian practice. It symbolizes unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature and a common approach to health and well-being. Yoga is not about workout but to discover the sense of oneness with ourselves, the world and Nature. It improves the potential aspects to its fullness and makes the mind passive and fresh. Healthy body is the first step to lead a blissful and better life and by having a healthy body it helps have a better faculty of Mind. The body has a vital role in the process of self-improvement.

Objectives of the study

This study was piloted to assess the effects of Kaya Kalpa and Deer Exercise among college girls which improves their abdomen strength.

Statement of the problem

In recent times, the teenage girls are not taking care of their health and not having healthy food. Due to that they are having many health issues and menstrual difficulties. As this study targets the college girls, which will be eye opening for the teenage girls and their family members.

Hypothesis

There were substantial differences in the subjects on selected variable of Abdomen strength test due to the practices of Kaya Kalpa with Deer exercise and only Suryanamaskaram group than the Control group.

Limitations

- Fiscal and social status were not considered for the study.
Each exercise has a count limit.
- Time limits were considered for each exercise.
- The genetic difficulties were not taken into consideration.
- The food, life style, sleep and regular routine works etc., were not controlled.

**Methodology**
For the study 60 college girls were taken from in and around Coimbatore were selected as subjects. The age of the subject is from 18 to 23 years. The students were divided into three groups each consisting of equal members. The experimental group I went on Kaya Kalpa with deer exercise training. The experimental group II went on Suryanamaskaram for 10 weeks for all 7 days in a week. The control group were not trained in any kind of exercises.

**Selection of variables**
- **Dependent variables**
  - **Physical variables**
    - **Abdominal Strength Test**
      - **Purpose:** The motive of this assessment is to find out the grade of abdominal strength.
      - **Equipment required:** Surface with even platform, board with degrees of angle.

**Procedure**
The person lies down on the next to the board of degree of angle. The person’s hip should be brought perpendicular to the intersection of the test board. The Subjects arms are placed on the chest and the head is rested to the ground. The subject’s both legs are elevated to a 90-degree angle while the upper body flat on the floor. The representative or the tester will place the hand under the lower back of the subject and the subject starts to lower the legs together to the starting position. The subject targets to bear the pressure on the tester’s fingers under the lower back by tightening the abdominals as the legs are lowered. The subject gradually drops both the legs till the hand’s pressure on the backside is fully gone. The lowest angle detected will be the measurement of the subject’s abdominal strength after the pressure is removed.

**Scoring**
The legs angle from the floor measured in degree will be the grade of the subject.

**Independent variables**
Yoga practices of
- I. Kaya Kalpa with Deer exercise
- II. Suryanamaskaram

For statistical investigation, the data collected from the pre-test and the post test on abdomen strength test of experimental groups and control group have been existed in Table I

<table>
<thead>
<tr>
<th>Test</th>
<th>Group1</th>
<th>Group2</th>
<th>Group3</th>
<th>DF</th>
<th>SS</th>
<th>MOS</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>75.65</td>
<td>74.95</td>
<td>75.4</td>
<td>2</td>
<td>5.033333</td>
<td>2.51</td>
<td>23.81*</td>
</tr>
<tr>
<td>Post</td>
<td>16.55</td>
<td>46.45</td>
<td>74.9</td>
<td>2</td>
<td>34054.23</td>
<td>17027.12</td>
<td>341.05*</td>
</tr>
<tr>
<td>Adjusted</td>
<td>16.62</td>
<td>46.36</td>
<td>74.91</td>
<td>2</td>
<td>33977.88</td>
<td>16988.94</td>
<td>357.25*</td>
</tr>
</tbody>
</table>

*Significance at 0.05 level

Table I indicates that the adjusted post-test means values of Abdominal strength for Kaya kalpa with Deer Exercise Group, Suryanamaskaram Group and Control Group are 16.62, 46.36 and 74.91 respectively. The attained F-ratio of 357.25 for adjusted posttest mean is far greater than the table value of 3.16 for DF 2 and 56 required for significant at 0.05 level of confidence.

The outcomes of the study point out that there are extensive variances among the adjusted post-test means of Kaya kalpa with Deer Exercise Group, Suryanamaskaram practice Group and Control Group on the abdominal strength rate.

To conclude which of the paired means had a substantial difference, the Scheffé’s test was applied as Post hoc test and the results are presented in Table II.

Table II displays that the adjusted post-test means differences on Kaya Kalpa with Deer Exercise Group and Suryanamaskaram Group, Kaya Kalpa with Deer Exercise Group and Control Group, Suryanamaskaram Group and Control Group are 29.73, 58.29 and 28.55 respectively. The value 15.19 which shows major differences at 0.05 level of confidence.

It could be firm from the effects of the study that there is a substantial difference in abdominal strength between the adjusted post-test means of Kaya Kalpa with Deer Exercise Group and Suryanamaskaram Group, Kaya Kalpa with Deer Exercise Group and Control Group, Suryanamaskaram Group and Control Group. However, the enrichments in the abdominal strength were expressively higher for Kaya Kalpa with Deer Exercise Group than Suryanamaskaram Group and Control Group.

It could be also seen that Kaya Kalpa with Deer Exercise Group and Suryanamaskaram had improvement in abdominal strength than Control Group.

The mean and adjusted values of pre and posttest of Kaya Kalpa with Deer Exercise Group, Suryanamaskaram Group and Control Group on Abdominal strength are graphically represented in the Figure -I.

Table: Scheffé’s test for the variances between the adjusted post-test means on Abdomen strength

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>C D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group1</td>
<td>16.62</td>
<td>46.36</td>
</tr>
<tr>
<td>Group2</td>
<td>46.36</td>
<td>74.91</td>
</tr>
<tr>
<td>Group3</td>
<td>74.91</td>
<td>28.55*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level of confidence
Conclusions
Based on the final result of the study the following conclusions were drawn.
1. There was a major difference between Kaya Kalpa with Deer exercise group and Suryanamaskaram group when equated to the control group on physical variables of abdominal strength.
2. Kaya Kalpa with Deer exercise was found to be better than the Suryanamaskaram group and control group in physical variables of abdominal strength.

Recommendations
1. An akin study may be conducted by selecting other physiological variables as principle variables.
2. A similar study may be conducted by choosing Performance related variables as criterion.
3. A related study may be endeavored by selecting other psychological variable.
4. A related study may be piloted for other female age group or male group as subjects.
5. Similar study may be undertaken to analyze the other Psychological parameters.
6. From this finding of the study it is recommended to the common people to adopt Kaya Kalpa with Deer Exercise for improving the Abdomen strength.

References
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