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Short Communication An Assessment of 6-Week Yogic Asanas Training on Health Related Fitness Components

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Abstract

The purpose of the present study was to assess the effects of 6-week training yogic asanas training on Health Related Fitness components. Data were collected on One Hundred and Twenty (N=120), subjects between the age group of 21-26 years were selected. 6-week yogic asanas training were given to the subjects from the Group A. Form the findings this is concluded that, the 6-week training programme of yogic asanas had significant effect on Health Related Fitness components. Thus, such yogic asanas may be recommended to improve Aerobic Fitness, Percent Body Fat, Abdominal Strength and Endurance and Trunk Flexibility.

Keywords: Health, Fitness, Assessment, 6-Week, Yogic, Training.

Introduction

According to the literature it is believed that yoga is traditionally beneficial effects on health, physical and mental aspect of the human being¹. Many Studies shows that practicing yoga techniques improved the overall performance of the individual and their positive and systematic effects on physical functions were reported². Yoga is made throughout the ancient Indian scriptures, vedas that are among the oldest texts in existence³. The overall performance is known to be improved by practicing yoga techniques⁴ and their effects on physical functions were reported⁵. This technique and practice can also be used as physiological and psychological stimuli to increase the secretion of melatonin which, in turn, might be responsible for perceived

well-being⁶. Evidence shows that yoga asans improves flexibility, cardiopulmonary endurance, muscle strength and endurance⁷.

Methodology

Subjects: One Hundred and Twenty (N=120), subjects between the age group of 21-26 years were selected. 6-week yogic asanas training were given to the subjects from the Group A.

Procedures: The yogic practices training programme was given to experimental group for 6 weeks of one session in the morning between 6.00 A.M. to 7.30 A.M for three days on Monday, Wednesday, and Friday.

 Table-1

 Yogic Practices Training Programme

| Week | Yogasana positions | Intensity | Repetition | Set | Frequency Per Week | Each Asana | Rest in between asanas |
|------|------------------------------|-----------|------------|-----|-----------------------|---------------|------------------------------|
| 1-2 | Standing Postures | 50% | 12 times | 4 | 3 days | 2 minute | 45 Seconds |
| 3 | Balancing Postures | 60% | 10 times | 4 | 3 days | 2 minute | 45 Seconds |
| 4 | Arm-Balancing Postures | 70% | 8 times | 4 | 3 days | 2 minute | 45 Seconds |
| 5 | Inverted Postures | 80% | 6 times | 4 | 3 days | 2 minute | 45 Seconds |
| 6 | Backward-Bending Postures | 85% | 6 times | 4 | 3 days | 2 minute | 45 Seconds |

(RM - Repetition Maximum)

Statistical Technique Employed: Student's t-test were used to assessed the between group differences. The level of $p \le 0.05$ was considered significant.

Results and Discussion

Table-2 Pre-Test and Post-Test Mean values (±SD), standard error of the mean and test statistic t of Cardiovascular Endurance

| Groups | | Mean | SD | SEM | t-value |
|--------------|-----------|--------|------|------|---------|
| Experimental | Pre-Test | 96.50 | 6.19 | 0.80 | 8.6435* |
| Group | Post-Test | 89.32 | 4.39 | 0.57 | |
| Control | Pre-Test | 106.53 | 7.61 | 0.98 | 1.3328 |
| Group | Post-Test | 105.50 | 6.78 | 0.88 | |

Table-2 The Pre-Test Mean Score of Experimental Group was 96.50 whereas Post-Test Mean Score was recorded as 89.32. The Pre-Test and Post-Test SD values were 6.19 and 4.39 respectively. The t-value 8.6435* was found to be statistically significant. However, the t-value 1.3328 was found to be statistically insignificant as obtained t-value was found smaller than the tabulated value 2.06.

Table-3 Pre-Test and Post-Test Mean values (±SD), standard error of the mean and test statistic t of Body Composition

| Groups | | Mean | SD | SEM | t-value |
|--------------|-----------|-------|------|------|----------|
| Experimental | Pre-Test | 25.63 | 1.67 | 0.22 | 25.6911* |
| Group | Post-Test | 19.10 | 1.80 | 0.23 | |
| Control | Pre-Test | 37.57 | 5.96 | 0.77 | 9.8205* |
| Group | Post-Test | 32.10 | 7.93 | 1.02 | |

Table-3 The Pre-Test Mean Score of Experimental Group was 25.63 whereas Post-Test Mean Score was recorded as 19.10. The Pre-Test and Post-Test SD values were 1.67 and 1.80 respectively. The t-value 25.6911* was found to be statistically significant. However, the t-value 9.8205* was found to be statistically significant as obtained t-value was found greater **3.** than the tabulated value 2.06.

Table-4

Pre-Test and Post-Test Mean values (±SD), standard error of the mean and test statistic t of Muscular Strength and Endurance

| Endurance | | | | | | | |
|--------------|-----------|-------|------|------|----------|--|--|
| Groups | | Mean | SD | SEM | t-value | | |
| Experimental | Pre-Test | 28.53 | 4.89 | 0.63 | 10.4557* | | |
| Group | Post-Test | 36.75 | 2.64 | 0.34 | 10.4337 | | |
| Control | Pre-Test | 21.90 | 4.78 | 0.62 | 4.8354* | | |
| Group | Post-Test | 20.18 | 4.24 | 0.55 | 4.0334* | | |

Table-5 The Pre-Test Mean Score of Experimental Group was 28.53 whereas Post-Test Mean Score was recorded as 36.75. The Pre-Test and Post-Test SD values were 4.89 and 2.64 respectively. The t-value 10.4557* was found to be statistically significant. However, the t-value 4.8354* was found to be statistically significant as obtained t-value was found greater than the tabulated value 2.06.

 Table-4

 Pre-Test and Post-Test Mean values (±SD), standard error of the mean and test statistic t of Flexibility

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|---|-----------|-------|------|------|----------|--|
| Groups | | MEAN | SD | SEM | t-value | |
| Experimental | Pre-Test | 17.53 | 1.79 | 0.23 | 20.8633* | |
| Group | Post-Test | 24.18 | 2.07 | 0.27 | | |
| Control | Pre-Test | 13.08 | 3.30 | 0.43 | 2.2812 | |
| Group | Post-Test | 11.75 | 2.90 | 0.37 | | |

Table-4 The Pre-Test Mean Score of Experimental Group was 17.53 whereas Post-Test Mean Score was recorded as 24.18. The Pre-Test and Post-Test SD values were 1.79 and 2.07 respectively. The t-value 20.8633* was found to be statistically significant. However, the t-value 2.2812* was found to be statistically significant as obtained t-value was found greater than the tabulated value 2.06.

Conclusion

Conculdingly from the above findings that yogic asanas had significant effect on cardiovascular endurance, body composition, muscular strength and endurance and flexibility.

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