



Linear periodization of yoga training development on body fat composition

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Abstract

We are looking for a more flexible, strong, capable body and a clear, positive heart and mind then yoga is given from us. A great form of exercise that will improve our fitness, as well as aiding with mental wellbeing. Yoga is a Sanskrit term meaning 'to join, unite or yoke together', and the essential purpose of yoga is to bring together body, mind and spirit into a harmonious whole. The central methods of yoga are physical postures or 'asanas' and movement, breathing techniques or 'pranayama' and meditation. Yoga includes guidance on healthy lifestyle, eating habits, mental attitude, and Ayurvedic medicine is also part of the Yogic path to health and balance. Physical benefits of yoga those are improved posture, Better sleep, increased natural energy level and vitality, Greater flexibility, strength and stamina. Yoga Gains Better balance, stronger immune system, Pulse and respiratory rate decreases, Blood pressure decreases, cardiovascular efficiency increases, Respiratory efficiency increases, Cholesterol decreases, Cleansing and regulating of all body systems.

Purpose: This study was to find out the Effect of Linear Periodization of Yoga Training on Body Fat Composition.

Hypothesis: It was hypothesized that the Effectiveness of Linear Periodization Yoga Training on Body Composition programme may improve the obesity.

Methodology: This study was designed to deal with the impact of Effectiveness of Linear Periodization Yoga Training on Body Fat Composition Such as Body Fat Percentage and Visceral Fat. Twenty four women subjects from Madurai district were randomly selected as subjects and their age was between 30 to 35 years. They were assigned into two groups. The selected subjects were divided into experimental group and control group at random. Linear periodization (LP) training initially uses high volume and low intensity. The training for LP progresses through mesocycles or phases where the volume decreases, and intensity increases. This style of training is broken down into phases that focus on hypertrophy, strength, power, and transition phases.

Statistical technique: Analysis of 't' ratio was used in this study. The level of significance is 0.05 level of confidence which considered being the appropriate from this study.

Conclusion: There was significant improvement of linear periodization Yoga training group on mass of Body Fat and Visceral fat.

Keywords: linear periodization, body fat, visceral fat, body composition

Introduction

We are looking for a more flexible, strong, capable body and a clear, positive heart and mind then yoga is given from us. A great form of exercise that will improve our fitness, as well as aiding with mental wellbeing. Yoga is a Sanskrit term meaning 'to join, unite or yoke together', and the essential purpose of yoga is to bring together body, mind and spirit into a harmonious whole. The central methods of yoga are physical postures or 'asanas' and movement, breathing techniques or 'pranayama' and meditation. Yoga includes guidance on healthy lifestyle, eating habits, mental attitude, and Ayurvedic medicine is also part of the Yogic path to health and balance. Physical benefits of yoga those are improved posture, Better sleep, increased natural energy level and vitality, Greater flexibility, strength and stamina. Yoga Gains Better balance, stronger immune system, Pulse and respiratory rate decreases, Blood pressure decreases, cardiovascular efficiency increases, Respiratory efficiency increases, Cholesterol decreases, Cleansing and regulating of all body systems.

Statement of the Problem

The purpose of this study was to find out The Effectiveness of Linear Periodization Yoga Training on Body Composition.

Hypothesis

It was hypothesized that the Effectiveness of Linear Periodization Yoga Training on Body Composition programme may improve the obesity.

Methodology

Selection of the Subjects: To achieve the purpose of these study twenty four women subjects were selected at random, from the Madurai district. The age of the subjects ranged from 30 to 35 years. The selected subjects were divided in to one experimental group and one control group at random.

Selection of experimental variables: The research scholar reviewed the various significant changes on selected performance variables were selected to 8 weeks training for linear periodization group in the training period divided into

three parts. First one is 1-3 week 1 repetition, then 4-6 weeks 2 repetitions, then last one is 7-8 week 3 repetition each repetitions 5 minutes resting time. The research scholar reviewed the variable literature from Book, Journals, periodicals, magazines and research papers taking in to consideration the following performance variable were selected.

- Linear Periodization Yoga Group N=12
- Control Group N=12
- 8 Weeks Training For Lp Group
- No Training for Control Group
- Yoga training Five days in a week
- Time 6.30 am to 7.30 am
- Age 30 to 35

Dependent variables

1. Body fat % - Omron body composition / units.
2. Visceral Fat – Scale (Karada Scan HBF-375)/ units.

Linear Periodization Training

Table 1

| S.No | Yoga | 1-3 Week repetition | 4-6 week repetition | 7-8 week repetition |
|------|-----------------|---------------------|---------------------|---------------------|
| 1 | Suryanamaskar | 1 | 2 | 3 |
| 2 | Pathahasthasana | 1 | 2 | 3 |
| 3 | Yoga Muthra | 1 | 2 | 3 |
| 4 | Vajrasana | 1 | 2 | 3 |
| 5 | Patchmotasana | 1 | 2 | 3 |
| 6 | Dhanurasana | 1 | 2 | 3 |
| 6 | Bhujangasana | 1 | 2 | 3 |
| 7 | Sarvanagasana | 1 | 2 | 3 |
| 9 | Halasana | 1 | 2 | 3 |
| 10 | Myrasana | 1 | 2 | 3 |

Analysis of Data

Statistical techniques: Analysis of t’ ratio was used in this study. The level of significance is 0.05 level of confidence which was considered to be the appropriate for this study.

Table 2: Summary of Mean and Dependent‘T’ Test for the Pre and Post Tests on Selected Physiological Variables Of Linear Peiodization Pranayama Training Group and Control Group on Body Fat % (Omron body composition / units)

| Group | No. of Subjects | Pre-test Mean | Post-test Mean | Standard Deviation | | Std. Error Mean | T-ratio |
|--------------------|-----------------|---------------|----------------|--------------------|------|-----------------|---------|
| | | | | Pre | Post | | |
| Experimental group | 12 | 16.47 | 15.71 | 1.83 | 1.86 | 0.17 | 6.22* |
| Control group | 12 | 16.31 | 16.29 | 1.86 | 1.85 | 0.34 | 2.04 |

*Significance at 0.05 level of confidence

To find out difference between experimental and control group of linear periodization pranayama training. Difference in two group’s t-ratio was employed and the level of significance was set at 0.05. Experimental group pre and post-test mean value were 16.47, 15.71 respectively. In Control group pre and post-test were mean value was 16.31, 16.29 respectively. In experimental the obtained t-ratio 6.22 was greater than the table value of 2.15 so it is found to be significant. In control group the obtained t-ratio 2.04 as

lesser than the table value of 2.15 so it was found to be insignificant.

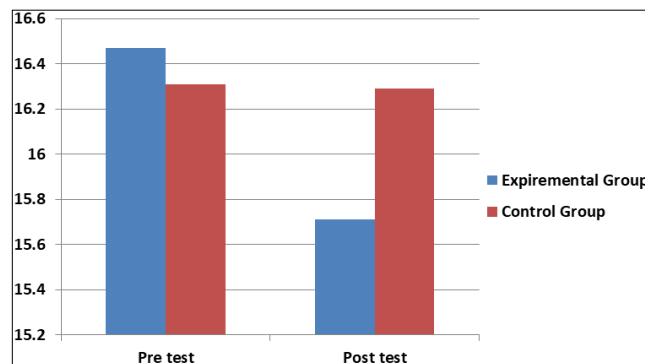


Fig 1: Bar Diagram Showing the Pre and Post Mean Test Value of Experimental and Control Group on Body Fat %

Table 3: Summary of Mean and Dependent‘T’ – Test for the Pre and Post Tests on Selected Physiological Variables of Linear Peiodization Pranayama Training Group and Control Group on Visceral Fat (Scale (Karada Scan HBF-375)/ units)

| Group | No. of Subjects | Pre-Mean | Post-Mean | Standard Deviation | | Std. Error Mean | T-ratio |
|--------------------|-----------------|----------|-----------|--------------------|------|-----------------|---------|
| | | | | Pre | Post | | |
| Experimental group | 12 | 4.63 | 4.00 | 1.97 | 1.75 | 0.17 | 6.97* |
| Control group | 12 | 5.00 | 4.87 | 1.49 | 1.35 | 0.34 | 1.39 |

*Significance at 0.05 level of confidence

To find out difference between experimental and control group of linear periodization pranayama training. Difference in two group’s t-ratio was employed and the level of significance was set at 0.05. Experimental group pre and post-test mean value were 4.63, 5.00 respectively. In Control group pre and post-test were mean value was 4.00, 4.87 respectively. In experimental the obtained t-ratio 6.97 was greater than the table value of 2.15 so it is found to be significant. In control group the obtained t-ratio 1.39 as lesser than the table value of 2.15 so it was found to be insignificant.

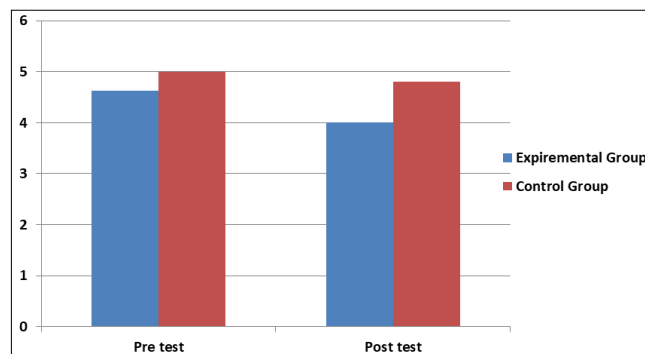


Fig 2: Bar Diagram Showing the Pre and Post Mean Test Value of Experimental and Control Group on Visceral Fat

Discussions on findings

The result of the study indicates that the experimental group namely The Effectiveness of Linear Periodization Yoga

Training on Body Composition the selected dependent variables namely physiological variables, when compared to the control group. It is also found that the improvement caused by linear periodization training when compared to the control group.

Discussions on hypothesis

It was hypothesized at the beginning of the study that there would be significant improvement on selected criterion variables such as The Effectiveness of Linear Periodization Yoga Training on Body Composition due to training for the experimental group as compared to the control group. The present study produced similar results. Hence, the first research hypothesis of the investigator was held true. In the hypothesis, it was mentioned that there would be significant difference between the experimental group and control group on selected criterion variables, the findings of the study were similar to this hypothesis. Therefore the second research hypothesis was also held true.

Conclusions

In the light of the study undertaken certain limitations imposed by the experimental conditions, the conclusion there was significant improvement of linear periodization Yoga training group on mass of Body Fat and Visceral fat.

Recommendations

In the following aspects, the present study either may be executed or conducted.

1. It is suggested that the coaches and physical education teachers can follow this training to develop the various physiological variable of common players.
2. The training programme can be conducted for 8 weeks
3. Similar study can be conducted on Physiological variables.
4. This study can be conducted on different age groups.

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