

Effect of “No Space Exercises” in the Context of Resistance Band Training on BMI of College Students

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Abstract – Ancient days there were frequent yogic, martial art practices, conference, but during this century these types of regular practices for people are happening once in a blue moon. The researcher wants to spice up the activity for all in a paradigm and provide them fitness with opulent opportunities. For doing regular physical exercise, people required a voracious appetite for fitness and beauty consciousness. Physical fitness is very necessary for healthy and tension free life. Fitness training also includes diet and good sleep. People are always complaining that, there is “no space and time” for exercise; this paper gives a direction to manage these limitations. Here, researcher illustrated the beneficial effects of the resistance activity in our life. Exercise programs in this paper describe the changes of a BMI for college sedentary women. For that, the purpose of the study was to find out the effect of band resistance exercise to know the changes in, the groups. In-order to serve this purpose 25 sedentary female subjects who were selected from college of engineering, Thrissur and they were under gone two month training programme. The age of subjects’ ranges from 18 to 22. Paired sample T-test statistical techniques used. In all these statistical tests, level of significance was fixed 0.05 levels. All statistical analysis was carried out with the help of statistical package SPSS 16.0 for WINDOW. The central value obtained from T- distribution with 59 degrees of freedom at level at level 0.05 is 1.96. Experimental group the mean (BMI) the pretest and post test scores are 28.12 and 20.96, its mean difference is 7.16. The calculated T -value is 11.63. Since T greater than the tabulated value, there is a statistically significance from pre to posttest mean difference score. Based on the analysis it is concluded that the effect of resistance band exercises, significantly decreased (BMI) variable of sedentary females.

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INTRODUCTION

Ancient days there were frequent yogic, martial art practices, conference, but during this century these types of regular practices for all people are happening once in a blue moon. The researcher wants to spice up the activity for all in a paradigm and provide the fitness with opulent opportunities. Doing regular physical exercise, people required a voracious appetite for fitness and beauty consciousness. Physical fitness is very necessary for healthy and tension free life. Fitness training considers diet and good sleep also. People are always complaining that, there is “no space and time” for exercise; this paper gives a direction to manage these limitations. Here, researcher illustrated the beneficial effects of the resistance activity in our life. Exercise programs in this paper describe the changes of a BMI for college sedentary women. Physical activity covers not just sports, but also simple everyday movements such as housework, walking and playing. Regular exercise has a great

impetus in maintaining good health, indeed inactivity is a risk factor for different chronic diseases. An exercise program for students aims to do exercise in limited space and without feeling weariness and to improve mood and decrease health risks associated with a sedentary lifestyle. There are a lot of “No space exercise” like Push-Ups, Dips, Squats, Lunges, stretching, shuttle run, Crunches, Leg Raises, Sit-Ups, High Knees, Jumping Jacks etc., in this paper is researchers mention about band resistance training ,this training have less injury prone. A resistance band is a lightweight elastic band used to induce muscular contraction. This contracting motion builds strength in the muscles as the user pulls against the band. Resistance bands have been around in some form or another since the early 20th century. At first, they were primarily used for rehabilitation. Those with damaged muscles would use the bands to recuperate their lost strength. Resistance bands are used both by those undergoing physical therapy and by anyone looking

to strengthen their muscles. There are primary types of resistance bands, and standard colors for the bands that indicate how much resistance they provide. A resistance band is a rubber elastic type used for fitness training. Bands are stretchable workout aids made from strong rubber material.

Available in different sizes and colours, resistance bands work by applying external resistance without holding weight. They are a great way to engage your lower and upper body areas. A resistance band basically creates tension in your muscles, contracting them in the process. As you stretch the band, this resistance increases. From sportspersons and athletes to fitness enthusiasts and senior citizens, resistance bands are useful for all kinds of people who want to get in shape and build those strong muscles and joints. In this study the researches will describe how the band exercise done changes in BMI.

OBJECTIVES

- To find out the Effect of resistance band exercise on BMI of women

DEFINITIONS

Body mass index

BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared its it a measure e of body to categorize that obese level .The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to BMI.

DELIMITATIONS

- The study was delimited to subjects' one group with female above aged 18 and below 22.
- The study was delimited to band exercise.

METHODOLOGY

The purpose of the study was to find out the effect of band resistance exercise to know the changes in, the groups. In-order to serve this purpose, 25 sedentary female subjects, who were selected from college of engineering, Thrissur for participating in two month training programme. The age of subjects' ranges from 18 to 22 .The importance of the study was explained to the subjects.

BODY MASS INDEX

BMI is a person's weight in kilograms (kg) divided by his or her height in meters squared. The National Institutes of Health (NIH) now defines normal weight, overweight, and obesity according to **BMI**

Procedure: The examiner explained the procedure of the test to students and if there is any confusion, students can ask to clarify it by raising their hands. The examiner collected data of height and weight of subjects before the training programme and after 2months of training .The researcher will apply the data on the formula. The result will be analysed based on chart shown below. For authenticating statistical analysis will do. The equipment used for this data collection is stadiometer, weighing scale.

BMI Formulae $BMI = \text{weight}/\text{height}^2$

Table 1 QUALITATIVE CRITERIONOF BMI

| Category | BMI range - kg/m ² |
|-------------------|-------------------------------|
| Severe Thinness | < 16 |
| Moderate Thinness | 16 - 17 |
| Mild Thinness | 17 - 18.5 |
| Normal | 18.5 - 25 |
| Overweight | 25 - 30 |
| Obese Class I | 30 - 35 |
| Obese Class II | 35 - 40 |
| Obese Class III | > 40 |

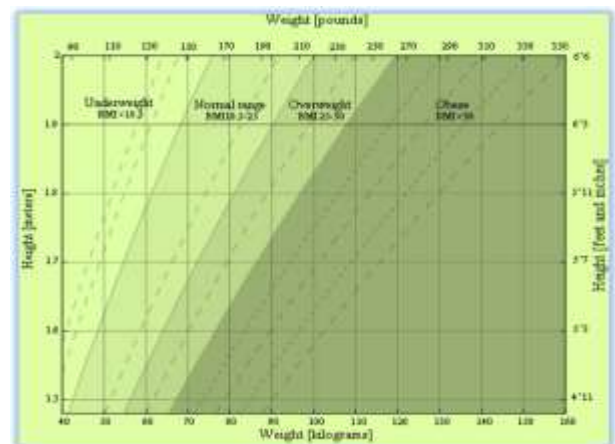


Fig 1

This is a graph of BMI categories based on the World Health Organization data. The dashed lines represent subdivisions within a major categorization.

Design - Chart-training schedule

| | |
|--|---|
| Period | Doing exercises with hand training for |
| 2months training Evening 3.30 to 4.30 | Bicep curls Chest press Triceps extensions |
| Models of exercises | Lunges Jumping jacks Wrist curls Leg curls Squats Ankle flexion Seated rowing |

fig 2

DESCRIPTION, ANALYSIS OF DATA, RESULTS AND DISCUSSIONS

The data of these variables analysed by Paired sample T-test statistical techniques. In all these statistical tests, level of significance was fixed 0.05 levels. All statistical analysis was carried out with the help of statistical package SPSS 16.0 for WINDOW.

Statistical analysis of BMI

| Descriptive Statistics | | | | | |
|------------------------|----|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| pretest | 25 | 23.00 | 32.00 | 28.1200 | 2.45483 |
| posttest | 25 | 18.00 | 30.00 | 20.9600 | 2.44063 |
| Valid N (listwise) | 25 | | | | |

| Paired T-test on control and experimental group of BMI | | | | | | |
|--|-----------|------------|------|----|---------|---------|
| Groups | Pre means | Post means | Dm | df | T value | P value |
| EG | 28.1200 | 20.9600 | 7.16 | 24 | 11.63** | .000 |

NS: Not significant, **: Significant

From table it is seen that the mean scores of (BMI) in pre- test and Post test scores The central value obtained from T- distribution with 59 degrees of freedom at level at level 0.05 is 1.96. experimental group the mean (BMI) the pre-test and post test scores are 28.12 and 20.96, its mean difference is 7.16. The calculated T -value is 11.63. Since T-greater than the tabulated value, there is a statistically significance from pre to post-test mean difference score.

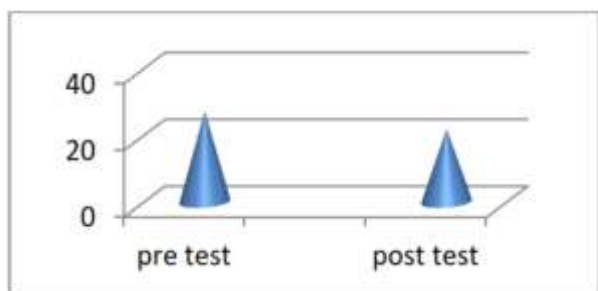


Fig 3. Shows pre to post-test mean score difference in (BMI) of control and experimental group

FINDINGS CONCLUSIONS

On the basis of the results of the study the following conclusions were drawn

1. The resistance band exercises training showed that, it significantly decreased (BMI) variable

SUMMARY AND RECOMMENDATIONS

On the basis of the study results and conclusions drawn the following recommendations are made.

1. The study summarizes that the resistance band training will reduce BMI of obese people or overweight sedentary female. It is

recommended that band exercises can use for other groups for reducing (BMI) under a qualified instructor and they can lead happy live hood, efficiency, management.

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