

Influence of Swiss ball training on selected Physical fitness variables among Football players

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Abstract

The purpose of the study was to find out the selected Physical fitness variables among football players after eight weeks of Swiss ball exercise training programme. The subjects for the study were selected randomly from different colleges of Chennai district, Tamilnadu, the age level of the subjects ranged from 18-25. The researcher selected 20 male students, as experimental group. Experimental group under went eight weeks of Swiss ball exercise training program. Pre-test and post test were taken before and after the training program for experimental group. To find out whether there was any significant difference between the pre-test and post test means, the dependent 't' ratio was used, at 0.05 level of confidence. The result of the study showed that the training program had resulted in a significant improvement in the abdominal strength and Flexibility of college students.

KEYWORDS: Swiss ball exercise, abdominal strength, Flexibility.

Introduction

Swiss ball are large, heavy-duty inflatable balls. The Swiss ball is also known by a number of different names including exercise ball, gym ball, Pilate's ball, fit or fitness ball, sports ball, stability ball, therapy ball yoga ball balance ball, body ball, or birth ball. Swiss Balls offer you a fun, safe and highly effective way to exercise. They will last for a very long time and are inexpensive compared to other exercise equipment.³ The Swiss ball was used as early as the 1960s. originally, it was used by and became known as the Swiss ball. Through seminars and classes the Swiss ball was introduced into the USA in early 1980's. But, the Swiss ball is far more versatile and valuable than simply for rehabilitation use. In late 1980's coaches, athletic trainers and personal trainers realized the effectiveness of the Swiss ball in developing balance and core strength. since then, they are reported as being the most effective method for core conditioning. Swiss ball are one of today's top fitness tools – and for good reason. Using a Swiss ball will improve the strength of the abdomen and lower back. Since the Swiss ball is unstable you have to consistently adjust your balance, which in turn will improve your balance and flexibility. As an extra challenge, you can use the exercise ball as a bench using free-weight to target those hard to reach stabilizer muscle.

The result is supported by the study of marshall (2006) which stated that the Swiss ball exercise greatly improve the strength of the core muscle.

Methodology

To achieve the purpose of the study, the investigator selected 20 football players from different colleges of Chennai district, Tamilnadu. The subjects ranged from 18- 25 years of age. The subjects were selected randomly. Twenty subjects in

the experimental group were assigned to specific training with Swiss ball for a period of eight weeks, four days in a week. For the present study the following dependent variables selected were abdominal strength, flexibility. Swiss ball Training was selected as independent variable. During the training programme, the subjects underwent their training programmes for five days per week (morning) over eight weeks. Every training session lasted for 45 to 60 min. approximately.

Analysis and interpretation of the data

Single group design was used for the study. The following statistical procedures were used to analyze the obtained data. To find out whether there was any significant difference between the pre-test means the dependent 't' ratio was used. To test the level of significance of difference between the means 0.05 level of confidence was fixed.

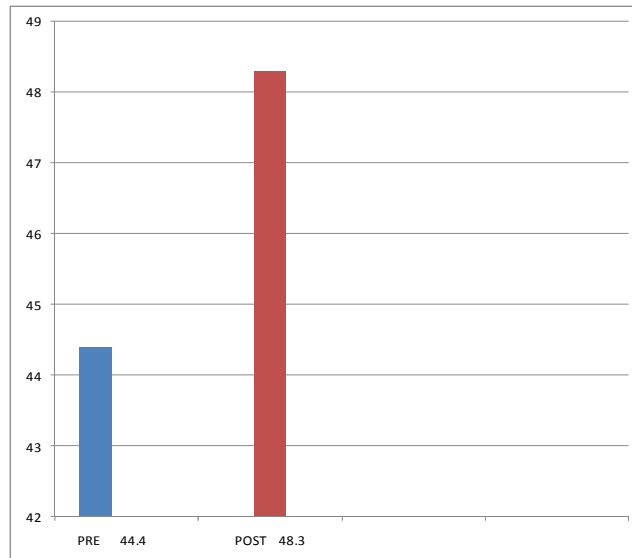
Table-I

COMPUTATION OF MEAN, STANDARD DEVIATION, STANDARD ERROR, MEAN DIFFERENCE AND OBTAINED 'T' RATIO OF EXPERIMENTAL GROUP ON ABDOMINAL STRENGTH

EXPERIMENTAL GROUP		Mean Difference	Standard Error	t ratio
	Mean			
PRE TEST	44.4000	3.9000	0.43332	9.00**
POST TEST	48.3000			

**Significant at 0.05 level

The calculated 't' value(9.00) is higher than the table value 2.04 at 0.05 level, hence it is significant. The result showed that there was a positive effect of eight weeks Swiss training programme on abdominal strength of football players.

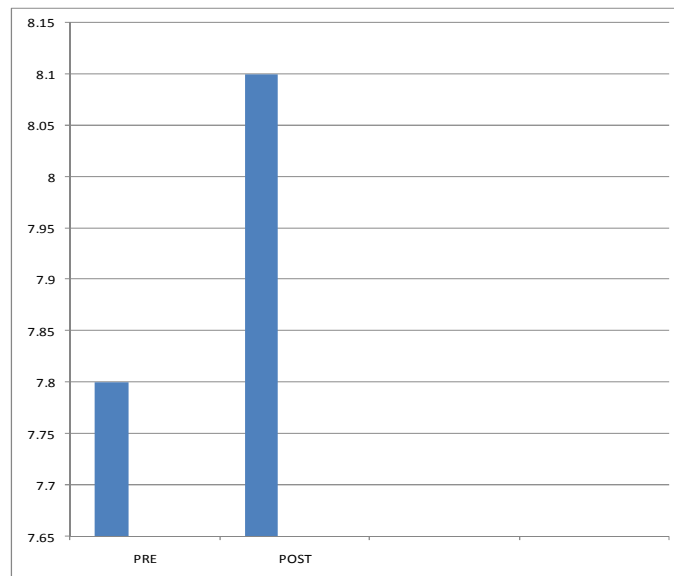
Figure - I**DIFFERENCE IN MEAN OF EXPERIMENTAL GROUP IN ABDOMINAL STRENGTH (SIT UPS)****Table-II****COMPUTATION OF MEAN, STANDERD DEVIATION, STANDERD ERROR, MEAN DIFFERENCE AND OBTAINED 't' RATIO OF EXPERIMENTAL GROUP ON FLEXIBILITY**

EXPERIMENTAL GROUP			M.D	σD M	t ratio
	M	S.D			
PRE TEST	8.1940	0.22594	0.25400	.07532	2.20**
POST TEST	7.9400	0.25400			

**Significant at 0.05 level

The calculated 't' value (2.20) was higher than the table value 2.04 at 0.05 level hence it is significant. The result showed that there was a positive effect of eight weeks Swiss ball training programme on flexibility of football players

Figure – II
DIFFERENCE IN MEAN OF EXPERIMENTAL GROUP IN
FLEXIBILITY (SIT AND REACH)



Conclusion

The results of the study indicated that there was a significant change in abdominal strength and flexibility in football players after eight weeks of Swiss ball exercise training.

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