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GLUT STRENGTHENING EXERCISE WITH FOAM ROLLER TRAINING AND RESISTANCE TRAINING IMPACT ON BALANCE AMONG FOOTBALL PLAYERS

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ABSTRACT

The goal intended on this investigation was to bring out the impact of gluts exercise with foam roller training and resistance training on Balance, which was experimented among football players. Sixty boy's football players were recruited for this enquiry based on the accessibility. Players who had got selection in Eagles Football clubs for youth team were considered as the subjects from Kakkanad in Ernakulam district of Kerala state. The subject age ranged from 14-18 as per the School/college records. The subject Preferred for this study were bifurcated according to their age in to three equals groups and designated as two treatment groups and one control group each consisted of twenty boy's football players. The group 1 received the training of resistance, group 2 received the glute strengthening exercises with foam rollers training group 3 were not subjected any special treatment and they are considered as a control group and they takes part only in prior and post testing session. Balance was measured through Strok Balance Stand Test. Duration of training schedule was 12 weeks. All statistical analysis the IBM SPSS (Statistical Package for Social Sciences) version 22 was used. One way ANCOVA was considered as a statistical tool. ANCOVA was significant, Scheffe's post hoc was applied. The significance level was set at 0.05 Confidence and p value is <0.005. From the termination of this study it was melded that there was a significant enhancement on physical variables of Balance due to the apparent effort of Resistance training and Glute strengthening Exercise with foam roller training on footballers. From that fact the elaborated hypothesis has been accepted.

KEYWORDS: Glut Strengthening Exercise, Foam Roller, Resistance Training

INTRODUCTION

Gluteal Muscles

The glutes comprise three muscles: the gluteus maximus, gluteus medius and gluteus minimus. It is frequently said that the gluteus maximus is the most grounded and most power full muscle in the human body. Glutes plays a cardinal and indispensable role in football. Basically football players have strong and big glutes. The fundamental movement's performance in football like kicking, dribbling, passing, trapping, fainting, heading, etc are colligate with gluteal muscle strength. The game football is an unstable position game or stability of the players is very less. The strength of the glute its provide better balancing power, one of the main reason for gluteal atrophy is that, glutel region was not fired properly. Strong glute always help to enhance the athletic performance.

Foam Roller

Foam Rolling is a self-myofascial discharge (SMR) procedure that is utilized by competitors and physical specialists to repress overactive muscles. This type of extending uses the idea of autogenic hindrance to enhance delicate

tissue extensibility, hence unwinding the muscle and permitting the actuation of the enemy muscle. The hardware that is utilized for Foam moving normally comprises of a Foam barrel of different sizes; regularly 12 crawls long, 6 inches in breadth. Be that as it may, longer Foam moves up to 36 inches long are created for moving over specific muscles in the back. while training our muscle will contract simontaseloy with the fast and slow rythem, so the chances of facia in our muscle was more, the foam rollers are used to eliminate these facial through a compressed pressure Foam rolling can help with separating these muscle hitches, continuing ordinary blood stream and work. Rollers are the most prominent system for self-myofascial discharge, or SMR, and are picking up fame among first class competitors of all strolls on account of the intense and normally quick effect it has on their execution and general wellbeing.

Resistance Training

Resistance preparing is any activity that causes the muscles to contract against an outside resistance with the desire of expansions in quality, tone, mass, and/or perseverance. The outside resistance can be dumbbells, elastic activity tubing, your own body weight, blocks, containers of water, or some other article that causes the muscles to contract. Resistance causing so as to prepare works minute harm or tears to the muscle cells, which thusly are immediately repaired by the body to help the muscles recover and become more grounded.

METHODOLOGY

The goal intended on this investigation was to bring out the impact of gluts exercise with foam roller training and resistance training on Balance, which was experimented among football players. Sixty boy's football players were recruited for this enquiry based on the accessibility. Players who had got selection in Eagles Football clubs for youth team were considered as the subjects from Kakkanad in Ernakulam district of Kerala state. The subject age ranged from 14-18 as per the School/college records. The subject Preferred for this study were bifurcated according to their age in to three equals groups and designated as two treatment groups and one control group each consisted of twenty boy's football players. The group 1 received the training of resistance, group 2 received the glute strengthening exercises with foam rollers training group 3 were not subjected any special treatment and they are considered as a control group and they takes part only in prior and post testing session. Balance was measured through Strok Balance Stand Test. Within the subjects, simple random sampling and co-variance experimental design was exploited to enquire the effect of glute strengthening exercise with foam rollers training and resistance training on balance. Duration of training schedule was 12 weeks. All statistical analysis the IBM SPSS (Statistical Package for Social Sciences) version 22 was used. One way ANCOVA was considered as a statistical tool. ANCOVA was significant; Scheffe's post hoc was applied. The significance level was set at 0.05Confidence and p value is <0.005.

Presenting the Data

While analyzing the data one influence of various independent variables for criterion variables were determined by collected data from subject which was analyzed with analysis of co variance that was conferred on following tables.

Table 1: Analysis of Co Variance for Pre –Test, Post Test and Adjusted Post Test Data on Balance of Resistance Training, Glutestreng Thening with Foam Rollers and Control Group of Football Players (In Seconds)

Test		Gluts with Foam Rollers	Resistance Training	Control Group	Sov	Sum of Square	Df	Means Square	F ratio	Sig.
Pre Test	Mean	16.10	16.65	14.25	B	52.43	2	26.22	0.73	.487
	S.D	6.33	6.49	5.06	W	2049.30	57	35.95		
Post test	Mean	18.85	17.80	13.25	B	354.43	2	177.22	6.51*	.003 *
	S.D	6.05	5.21	4.22	W	1549.50	57	27.18		
Adjusted Post test	Mean	18.57	17.10	14.23	B	191.68	2	95.84	14.99*	.000 *
					W	357.94	56	6.39		

***Significant level 0.05 and p value<0.005.**

The table value for significant at 0.05 level with 2&57 and 2 &56 degree of freedom are 3.16 and p<0.005

Table I exhibit that the Pre test mean value of **Balance** on the Glute strengthens with Foam rollers, Resistance training and the Control group are **16.10, 16.65** and **14.25** respectively. The reckon 'F' ratio value **0.73** for the pre test score of the Resistance training, Glute strengthening with Foam roller and the Control group of Balance is lesser than the required table value of **3.16** and the obtained P value of **0.487** is more than the required P value of **0.005** (p<0.005) for significant at 0.05 level. Hence it is not significant and it discovered that there is no significant difference among the Resistance training, Glute strengthening with Foam roller and the Control group of **Balance** before the implementation of investigation training. It shows the ergodic selection of the subject for the three groups is prosperous. After the experimental applicable tests mean value for **Balance** on the Resistance training, Glute strengthening with Foam roller and the Control group are **18.85**, **17.80** and **13.25** in the order given The calculated 'F' ratio value **6.51** for post test score is higher than the table value of **3.16** for 2 & 57 degree of freedom at 0.05 level and the incur P value **0.003** also lesser than the required p value 0.005 (p<0.005). It shows that there is positive significant relationship among Resistance training, Glute strengthening with Foam roller and the Control group for the variable of **Balance.** The adjusted post test values for the **Balance** on Resistance training, Glute strengthening with Foam roller and the Control group are **18.57, 17.10** and **14.23** in orderly. The reckon 'F' ratio of adjusted post test value is **14.99** which is higher than the requisite table value **3.16** for 2 & 56 degree of freedom at 0.05 level of significant and the received p value **0.000** is lesser than the required p value of 0.005 (p<0.005). Apart from the result it exposes that there is a significant differences among Resistance training, Glute strengthening with Foam roller and the Control group on the variable of Balance.

Table 1-A: Adjusted Mean Differences and Scheffe's Post Hoc Test Onbalance among Resistance Training, Glute Strengthening with Foam Roller and the Control Group (in Seconds)

Glute Strengthening with foam Rollers	Resistance Training	Control Group	Mean Differences	CI
18.57	17.10		1.47	2.01
18.57		14.23	**4.34***	
	17.10	14.23	**2.87***	

Table 1–A disclose Scheffe's post hoc test which was the method of testing the significant to find the mean difference among the Resistance training, Glute strengthening with Foam roller and the Control group on the variable of

Balance. The mean difference between the Glute strengthening with foam roller training and resistance training is **1.47** and **4.34** in the case of Glute strengthening with foam roller and control group. Mean difference between Resistance training and Control group is **2.87**. The present result indicates that the Balance experimental group have significantly enhanced when tabulated to the control group CI value of **2.01**. Hence it was melded that there is a positive variation between Glute strengthening with foam roller training with control group and between Resistance training groups with Control group.

The tabulated results of this study, mean value of Glute strengthening with foam roller training, Resistance training and control group on Balance are presented in figure 4 in a diagrammatical manner.

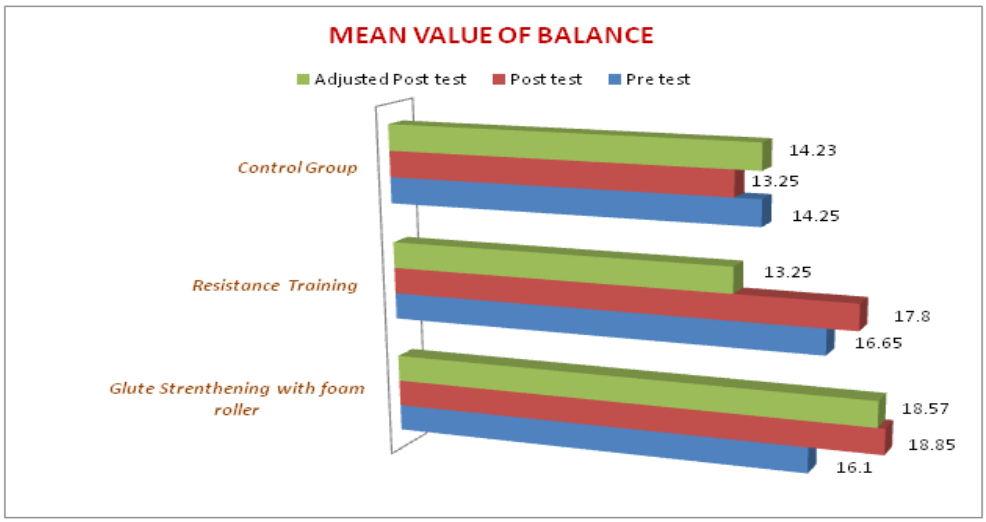

Figure 1: Bar Diagram Shows Pre Test, Post Test and Adjusted Post Test for Balance of Glute Strengthening with Foam Roller, Resistance Training and Control Group (In Seconds)

From the termination of this study it was melded that there was a significant enhancement on physical variables of Balance due to the apparent effort of Resistance training and Glute strengthening with foam roller training on footballers. Glutes strengthening with foam rollers training exposed better **Balance** compared to resistance training. The investigation reports emphasis that there was a significant enhancement on physical variables of **Balance** with the effects of gluts stretching with foam roller and resistance training on youth men football players. But the Glutes strengthening with foam rollers training holds more grip than to resistance training. So that Glutes strengthening with foam rollers training may increase the **Balance** so it may be practicable for football players as well as in the field of sports and games.

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