

## IMPACT OF RESISTANCE TRAINING AND GLUTES STRENGTHENING WITH FOAM ROLLER TRAINING ON DRIBBLING AMONG FOOTBALL PLAYERS

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### **ABSTRACT**

*The investigation was aimed to reveal the impact of resistance training and glutes strengthening with foam rollers training on football players dribbling efficiency. 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 separated according to their age in to three equal groups and designated as two treatment groups and one control group each consisted of twenty boys football players. The group 1 received the training of glute strengthening exercises, group 2 received training of Resistance, group 3 were not subjected any special treatment and they are considered as a control group and they take part only in prior and post testing session. Dribbling was measured through Mor Cristian soccer skill 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:** *Resistance Training, Glute Strengthening Exercise, Foam Roller, Dribbling*

### **INTRODUCTION**

#### **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.

#### **Gluteus 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 powerful 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 the 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 , gluteal 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. 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. Longer Foam that moves up to 36 inches long, are created for moving over specific muscles in the back. 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.

### **Methodology**

The goal intended on this investigation was to bring out the impact of resistance training and glute exercise with foam roller training on Dribbling, which was experimented among football players. Sixty boys' football players were recruited for this inquiry 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 subjects preferred for this study were bifurcated according to their age into three equal groups and designated as two treatment groups and one control group each consisted of twenty boys' 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 to any special treatment and they are considered as a control group and they take part only in prior and post testing session. Dribbling was measured through Mor christain soccer skill Test. Within the subjects, simple random sampling and co-variance experimental design was exploited to ensure the effect of resistance training and glut strengthening exercise with foam rollers training on dribbling efficiency. 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.

### **Presenting the Data**

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

**Table 1: Analysis of Co Variance for Pre Test, Post Test and Adjusted Post Test Data on Dribbling of Resistance Training, Glute Strengthening 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	25.23	25.06	25.07	<b>B</b>	4.43	2	2.21	0.20	.821
	S.D	3.86	3.35	2.74	<b>W</b>	639.62	57	11.22		
Post test	Mean	23.73	23.81	26.05	<b>B</b>	68.96	2	34.48	3.01	.057
	S.D	2.83	3.21	3.05	<b>W</b>	652.21	57	11.44		
Adjusted Post test	Mean	23.81	24.01	25.74	<b>B</b>	44.01	2	22.01	<b>5.82*</b>	<b>.005*</b>
					<b>W</b>	211.46	56	3.78		

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 **Dribbling** on the Glute strengthens with Foam rollers, Resistance training and the Control group are **25.23, 25.06**and **25.07** respectively. The reckon ‘F’ ratio value **0.20**for the pre test score of the Resistance training , Glute strengthening with Foam roller and the Control group of dribbling is lesser than the required table value of **3.16** and the obtained P value of **0.821**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 **Dribbling** before the implementation of investigation training.

After the experimental applicable tests mean value for **Dribbling** on the Resistance training, Glute strengthening with Foam roller and the Control group are **23.73, 23.81**and **26.05**in the order given The calculated ‘F’ ratio value **3.01**for post test score is lesser than the table value of **3.16** for 2 & 57 degree of freedom at 0.05 level and the incur P value **0.057** higher than the required p value 0.005 (p<0.005). It shows that there is no significant relationship among Resistance training, Glute strengthening with Foam roller and the Control group for the variable of **Dribbling**. The adjusted post test values for the **Dribbling** on Resistance training, Glute strengthening with Foam roller and the Control group are **23.81, 24.01**and **25.74**in orderly. The reckon ‘F’ ratio of adjusted post test value is **5.82** 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 **0.005** is equal the required p value of 0.005 (p<0.005). Apart from the result, it exposes that there is a significant difference among Resistance training, Glute strengthening with Foam roller and the Control group on the variable of **Dribbling**.

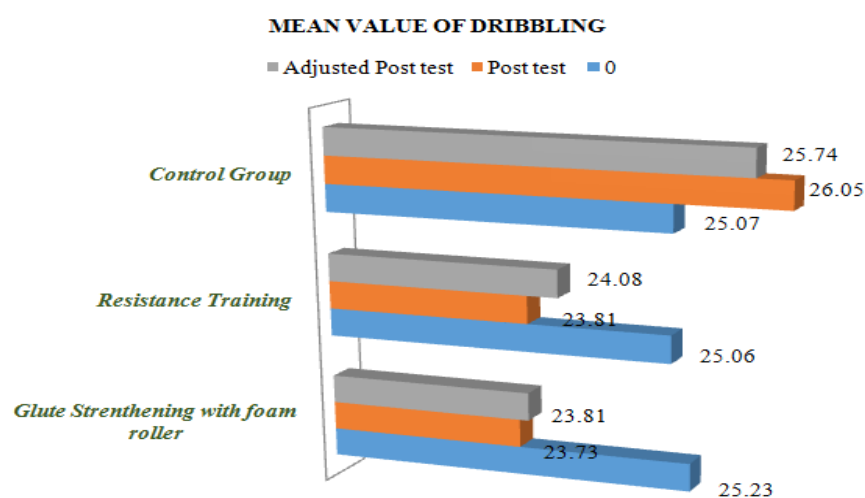
**Table 2: Adjusted Mean Differences and Scheffe’s Post Hoc Test on Dribbling among Resistance Training, Glute Strengthening with Foam Roller and the Control Group (In Seconds)**

Glute Strengthening with Foam Rollers	Resistance Training	Control Group	Mean Differences	CI
23.81	24.05		0.24	1.55
23.81		25.74	<b>1.93*</b>	
	24.05	25.74	<b>1.69*</b>	

Table I–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

**Dribbling** . The mean difference between the Glute strengthening with foam roller training and resistance training is **0.24** and **1.93** in the case of Glute strengthening with foam roller and control group. Mean difference between Resistance training and Control group is **1.69**. The present result indicates that the **Dribbling** experimental group has significantly enhanced when tabulated to the control group CI value of **1.55**. 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 **Dribbling** are presented in figure -1 in a diagrammatical manner.



**Figure 1: Bar Diagram Shows Pre Test, Post Test and Adjusted Posttest for Dribbling 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 Dribbling 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 Dribbling compared to resistance training. The investigation reports emphasized that there was a significant enhancement on physical variables of Dribbling with the effects of gluts stretching with a foam roller and resistance training on young 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 Dribbling.

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