KETTLEBELL TRAINING AND SKILL RELATED PHYICAL VARIABLE AMONG SPORTS HOSTEL GIRLS

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ABSTRACT

The purpose of the present study was to determine the kettlebell training and skill related physical variable among sports hostel girls. To achieve the purpose of this study200 subjectsofage range14-17years wereonlyselected were selected from all the (SDAT) sports hostel girls, Tamilnadu, India. The subjects were randomly selected and their age group ranged from age range14-17years wereonlyselected. The selected groups were divided into two groups, an experimental group and a control group. The experimental group (eg) underwent the medium of kettlebelltraining. The control group (cg) was not exposed to any training. Kettlebell training is considered as the independent variable. The physical variable (ArmExplosivePower) is dependent variables. To find if any significant mean difference existed between pre and post-test of control and experimental groups, paired "t" test was applied at 0.05 level of confidence. The data collected on selected variables prior to training (pre-test) and after twelve weeks (post-test). ANCOVA was used to find out if any significant improvement exists between theexperimental and control group.

KEYWORDS: Kettlebell training**,** ArmExplosivePower.

INTRODUCTION

KETTLEBELLHISTORYANDDEVELOPMENT

Over the past decade, kettlebell swings have grown in popularity as a quick full-body workout. Originating in Russia, kettlebells (called Girya in Russian) are associated withgreatpowe rand strength. TheywereoriginallyusedtomeasureagainsttheKettlebell is a peculiar piece of gym equipment. While it looks like a cannonball with alooping handle protruding at the top, it can easily be mistaken for an ironcast tea kettle onsteroids. It also happens to be growing in popularity, allowing athletes and those justtrying to stay in shape to perform a wide range of specialized strength-building exerciseswithkettlebells.It's hard to say who invented the kettlebell, though variations of the concept go asfarbackasAncientGreece.There'sevena315-poundkettlebellwiththeinscription"Bibonheavedupmeaboveaheadbyonehead"ondisplayattheArchaeological Museum of Olympia in Athens. The first mention of the term, however,shows up in a Russiandictionary published in 1704 as "Girya," which translates to"kettlebell" in English.

Kettlebell exercises were later popularized in the late1800s by a Russian physician named Vladislav Kraevsky, considered by many to be the country's foundingfather of Olympic weight training. After spending roughly a decade traveling around theworld researching exercise techniques, he opened one of Russia's first weight trainingfacilities where kettlebells and barbells were introduced as a core part of a comprehensivefitnessroutine.

STATEMENTOFTHEPROBLEM

The eminent objectives of this study intended to find out the effect of Kettlebelltraining and skill related physical fitness components of sports hostelgirls.Secondly,thisstudyintendstofindoutgame-wisesuitabilityofKettlebell training.

HYPOTHESES

Thefollowing hypotheseswereoutlinedforthestudy

1. It was hypothesized that, there might be a significant improvement skill related physical fitness parameters of sports hostel girls due to Kettlebelltraining.
2. It was hypothesized that, kettlebell training group might show better improvement over the skill related physical fitness parameters than the control group.
3. It was also hypothesized that, kettlebell training might not show any difference inimprovementamong various sport disciplines.

METHODOLOGY

The purpose of the study was to find out the effect of kettlebell training on selected physical fitness parameters of sports hostel. To achieve the purpose of this study200 subjectsofage range14-17years wereonlyselected were selected from all the (SDAT)sportshostel girls,tamilnadu, india. The subjects were randomly selected and their age group ranged from age range14-17years wereonlyselected. The selected groups were divided into two groups, an experimental group and a control group. The experimental group (eg) underwent the medium of kettlebell training. The control group (cg) was not exposed to any training. Kettlebell training is considered as the independent variable. The physical variable (ArmExplosivePower) are dependent variables. Data were analyzedbyusingthecovariance(ANCOVA).Statistical significance was fixed at 0.05 levels.

SELECTION OF THE VARIABLE

Sl. No	Variables	Test /Instruments	Unit of Measure
1	ArmExplosivePower	Medicineball throw	minute

TABLE - I
TABLE SHOWING ANALYSIS OF COVARIANCE AMONGEXPERIMENTALAND CONTROL GROUPS ONARM EXPLOSIVEPOWER

Group	AdjustedPost testmean	Source	Sum ofSquares	df	MeanSquare	F	Sig.	Partial EtaSquared
Experimental group	6.702	Contrast	83.014	1	83.014	509.196.000		.721
Control group	5.408	Error	32.117	197	.163			

SignificancelevelP<0.05.

Table - 1 revealed that ANCOVA between experimentaland control groupsF ratio on Arm Explosive Power is 509.196 with dff(1 and 197) is 3.889 (two tail). However, Pvalueis 0.000<0.05 level of significant.It indicates significant improvement difference found between experimental and control groups on Arm Explosive Power. Adjusted post- test Mean value of Arm Explosive Power between experimental and control groups in figure1.

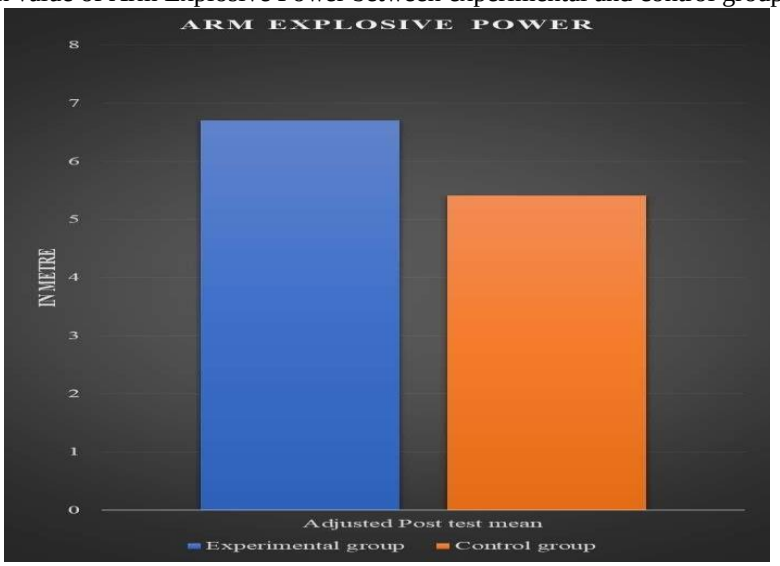

FIGURE 1: ADJUSTED POST TEST MEAN VALUE ON ARM EXPLOSIVE POWERBETWEENEXPERIMENTALAND CONTROL GROUP.

DISCUSSION ON FINDINGS

The results of the study indicate that the kettlebell trainninggroup were significantly improved the armexplosivepowerit may be due to the nature of the kettlebell trainingwhich have influenced to increase the selected physical fitness parameters of sports hostel. The results of the study indicate that there is a significant improvement on kettlebell trainninggroup physical variables of the when compared to the control group. This study is supported by **(Suneeta Devi (2016))** which resulted that the effect of selected exercises significantly increased the arm explosive power among the fitness parameters of sports hostel and Singh (2016) had shown the increase in the

arm explosive power among goal keepers of handball of **Himachal Pradesh. MantuBaro, et.al., (2017)** was about the relationship between explosive leg strength and speed of inter college level sprinters. **Kumar (2017)** that Effect of three month yoga asana practice improved the on shoulder strength of cricketers. **Trikha (2017)**

CONCLUSIONS

- The results of the study reveal that there is a significant improvement on physical variables such as arm explosive power in the kettlebell training group when compared to the control group.
- These changes are due to training as well as due to participating in kettlebell training.
- The training inspires changes in physical variables such as arm explosive power of the sports hostel girls.
- The uniqueprofile should be taken into consideration while administering training to the sports hostel girls.

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