

RESISTANCE TRAINING AND ITS EFFECTS ON EXPLOSIVE POWER AMONG GIRLS

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Abstract

For this study 40 girls from an different colleges under Kerala university were selected in the age bracket of 18 to 25. They were graduate and post graduate level students. The selected subjects were divided in to two groups. Each group carries 20 subjects. One group is termed as experimental group of the author group (EG) and the author group as controlled group (CG). The intervention programme is for a period of 42 days 6 days per week. Every day two sessions will be conducted for the experimented group and the control group did not participate other than their daily study schedules. Moderate intensity (65-70%) of resistance was used in this experimentation. The result of the study indicated that there was a significant difference between the adjusted post tests mean of resistance training group and control group on leg explosive power at 0.05 levels.

Keywords: Resistance Training, Explosive Power, Girls.

Introduction

Physical Education and sports science has always been the promotions and improvement of “Health and Physical Fitness” through big muscular activity., such as conditioning for various adaptations. (Reeme Kirtani, 1998). Over the years, physical fitness-the ability to do one’s work and have energy remaining for basic recreational activity – has been advocated for two basic reasons: to prevent illness and diseases and to help rehabilitation. These new goals of physical fitness are now recognised as significant outcomes of regular exercise. Regular participation in vigorous exercise increase physical fitness. A high level of fitness is desirable for a full, productive life. Sedentary living habits and poor physical fitness have a negative impact on both health and daily living. The national education policy which was established by the Government of India in 1985 also gave adequate importance to the programme of Physical Education and Physical Fitness at the institutional level and stipulated that every educational institution should have adequate sports facilities and other fitness activities.

In the present day, all individuals feel the importance of educational values in their life. In the process of education many people who follow the concept of educational values in their literacy and theoretical knowledge are the only channels of education, Where as education includes the mental, physical, social, spiritual and economical

dimension to the process of learning. In order to find out the relationship between the academic achievements and the selected physical fitness among the school student. In modern days, the concept of education as a social function has not changed, but the methods have been changed. In the primitive days the society was not as complex as it today. It is simple for the society to transmit its experienced to the new generations. But today’s society being complex in its knowledge and skills cannot itself transmit all these directly to the fast rising new generation. Now there is a need for an organised formal institution to impart the essential knowledge and fundamental skills. The establishment of a school does an introductory role in bringing educational agencies like home, temple, radio, press and other influence in a selected and controlled environment.

In the present educational system, the school programme is no longer confined to tex books only but also subject matter is connected with the real life activities of students and with the activities going on in the community. The need to point out in the priority areas of educational system makes necessary, the identification of the factors contributing mostly to the educational achievement of student learning. One of the aims of education is to make the sound mind in a sound body. But nowadays the mental health of the students is very low. Through meditation mental health can improved. It helps the students to take

responsibility for their own mental status and choosing to alter their responses so that they produce outcome that is more conducive to well being and happiness. The present investigation was an attempt to study the effect of meditation on the mental health of higher secondary school students.

Methods and Materials

For this study 40 girls from an different colleges under Kerala university were selected in the age bracket of 18 to 25. They were graduate and post graduate level students. The selected subjects were divided in to two groups. Each group carries 20 subjects. One group is termed as experimental group of the author group (EG) and the author group as controlled group (CG). The intervention programme is for a period of 42 days 6 days per week. Every day two sessions will be conducted for the experimented group and the

control group did not participate athon than their daily study schedules. Moderate intensity (65-70%) of resistance was used in this experimentation.

Collection of Data

The independent variable for this study was explosive power and was measured by using standing broad jump. The resistance exercise used were O bench press, half squat, push press, had raise arm, curl, leg curl, military press and modified setups. Data were collected one day prior to the experiment treatment and one day after the treatment.

Analysis and Interpretation of data Statistical procedure

The data was analyzed by using analysis of co-variance (ANCOVA). Significance level was fixed at 0.05 levels.

TABLE I
ANALYSIS OF COVARIANCE ON LEG EXPLOSIVE POWER OF EXPERIMENTAL GROUP AND THE CONTROL GROUP

Test		Experimental Group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	F ratio
Pretest	Mean	1.52	1.53	B	0.0018	1	0.0018	0.08
	SD	0.14	0.14	W	0.75	37	0.02	
Post test	Mean	1.74	1.54	B	0.45	1	0.45	19.54
	SD	0.17	0.13	W	0.88	37	0.02	
Adjusted Post test	Mean	1.75	1.53	B	0.51	1	0.51	165.9
	SD	0.17	0.13	W	0.11	38	0.0031	

Significant, $F = (df1, 38) (0.05) = 4.10$; $(P \leq 0.05)$, $F = (df 1, 37) (0.05) = 4.11$; $(P \leq 0.05)$

Table 1 shows that the pre test mean of experimental and control groups are 1.52 and 1.53 respectively. The obtained F ratio of 0.08 for pre test mean is less than the table value 4.10 for df 1 and 37 required for significance at 0.05 level. The post tests mean of experimental and control groups are 1.74 and 1.54 respectively. The obtained F ratio of 19.54 for post test mean is higher than the table value 4.10 for df 1 and 37 required for significance at 0.05 level. The adjusted post test mean of experimental and control groups are 1.75 and 1.53 respectively. The obtained F ratio of 165.9 for adjusted post test mean is higher than the required table value 4.11 for dt. 1 and 37 required for significance at 0.05 level. The result of the study indicated that there was a significant difference between the adjusted post tests mean of resistance training group and control group on leg explosive power at 0.05 levels. On the light of the above student which is carried out among the two groups (Control and Experimental) the investigator arrived the following.

Conclusion

1. Resistance training has been shown to increase factors associated with explosiveness.
2. Leg explosive power can be improved through resistance training.
3. Moderate intensity resistance training programme improve leg power.
4. Resistance exercise can be considered as best for explosive power.

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