

EFFECTS OF THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

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ABSTRACT - The objective of this study is to determine the Effects of the Varied Regimens of Training Program on Explosive Power and Flexibility of Industrial Training Students. To achieve the purpose of the study, 45 male students were selected from industrial training students, Karnataka and they were randomly assigned into three groups of 15 in each. Group-I (n=15) underwent calisthenics exercise training, group-II (n=15) underwent own body resistance training and group-III (n=15) acted as control. The duration of the training programme is 12 weeks with three sessions per week on alternative days. explosive power and flexibility were priorly assessed and directly after 12 weeks of training. Treatment groups performed calisthenics exercise training and own body weight training, the control group did not practice any specific trainings. The obtained data were analyzed statistically by 't' test, analysis of covariance, ANOVA and scheffee's post hoc test. Findings of the study reveal that significant improvement on the selected variables of speed and agility whereas significant decrease during the detraining period.

Key words: Calisthenics Exercise Training, Own Body Resistance Training Group, Explosive Power and Flexibility.

1. INTRODUCTION

The word calisthenics comes from the ancient Greek words kalos which means "beauty", and sthenos means "strength". It is the art of using one's body weight and qualities of inertia means to develop physique. According to the Encyclopedia Britannica it was named after one of its earliest proponents, the Greek historian Callisthenes, even if it has been adapted to English with wrong spelling.

Disciples of Friedrich Ludwig Jahn brought the version of gymnastics to the United States, while Catherine Beecher and Dio Lewis set up physical education programs for women in the 19th century. Organized systems of calisthenics in

America took a seat to competitive sports after the battle of the systems, when the states mandated physical education systems.

Calisthenics is associated with the rapidly growing international sport called street workout. Street workout as a sport consists of athletes competing against one other by showing their body-weight, strength and body-control in timed routines to impress a panel of judges. The World Street Workout and Calisthenics Federation (WSWCF) based in Latvia, orchestrates the annual National Championships up to 50 different countries (as of 2015) and hosts the World Championships for all the national champions to compete at one competition. The World Calisthenics Organization (WCO) based in Los Angeles, CA, promotes a series of competitions known globally as, Battle of the Bars(R). The WCO created the first set of rules for true 1 vs 1 competitions, including weight classes, timed round system, original judging criteria and a 10 point mandatory system which increasing the number of athletes worldwide an opportunity to compete in these worldwide competitions.

2. STATEMENT OF THE PROBLEM

The purpose of the study is to find out the Effects of Varied Regimens of Training Program on Explosive Power and Flexibility of Industrial Training Students.

3. HYPOTHESIS

1. The calisthenics exercise training can significantly improve the explosive power and flexibility of industrial training students.
2. The own body resistance training can significantly improve the explosive power and flexibility of young children.
3. The calisthenics exercise training may significantly improve better than the own body resistance training and control group on explosive power and flexibility of industrial training students.
4. The own body resistance training may significantly improve better than the control group on explosive power and flexibility of young children.

4. METHODOLOGY

The purpose of the study is to find the effects of the varied regimens of training program of the calisthenics exercise training to achieve the aim of the Industrial Training Students. The subjects were selected from Industrial Training Students, Karnataka, India. The subjects' age ranged from 25-35 years and the students voluntarily participated in this study. The selected variables were tested by explosive power (vertical jump) and flexibility (sit and reach). Pre-test data was taken before the training and the post test data was collected after the completion of a twelve week training period. The subjects were randomly assigned by the different groups. The first group (n=15, CEG group) underwent calisthenics exercise training, the second group (n=15; OBWTG group) underwent own body resistance training, the third group (n=15, CG group) did not have any specific trainings. Based on this study, 't' ratio was applied to find out the significant difference between the pre and post tests with regards to the selected variables and analysis of covariance was applied.

Table-1

SIGNIFICANCE OF MEAN GAIN /LOSES BETWEEN PRE AND POST TEST CALISTHENICS EXERCISE TRAINING ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variable	Test	Mean	S.D	M.D	S.E.M	't' ratio
Explosive power (in centimeter)	Pre-Test	38.4667	3.96172	1.86	0.23	7.897
	Post -Test	40.3333	3.81101			
Flexibility (in centimeter)	Pre-Test	34.5333	3.66190	1.46667	.37628	3.898
	Post -Test	36.0000	3.31662			

Table-2

SIGNIFICANCE OF MEAN GAIN /LOSES BETWEEN PRE AND POST TEST OWN BODY RESISTANCE TRAINING ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variable	Test	Mean	S.D	M.D	S.E.M	't' ratio
Explosive power (in centimeter)	Pre-Test	38.5333	3.77712	2.60000	0.66045	3.937
	Post -Test	41.1333	3.94365			
Flexibility (in centimeter)	Pre-Test	34.6000	3.73784	3.20000	0.58716	5.450
	Post -Test	37.8000	4.05674			

SIGNIFICANCE OF MEAN GAIN /LOSES BETWEEN PRE AND POST TEST CONTROL GROUP ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variable	Test	Mean	S.D	M.D	S.E.M	't' ratio
Explosive power (in centimeter)	Pre-Test	38.8667	5.66779	0.13333	.09085	1.468
	Post -Test	39.0000	5.73212			
Flexibility (in centimeter)	Pre-Test	34.8667	4.62704	0.06667	.06667	1.000
	Post -Test	34.9333	4.72783			

Table-4

ANALYSIS OF VARIANCE ON PRE TEST MEANS AMONG CETG, OBRTG, AND CG ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variable	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Explosive power (in centimeter)	Between Groups	1.378	2	.689	.033	.967
	Within Groups	869.200	42	20.695		
	Total	870.578	44			
Flexibility (in centimeter)	Between Groups	.933	2	.467	.029	.972
	Within Groups	683.067	42	16.263		
	Total	684.000	44			

Table-5

ANALYSIS OF VARIANCE ON POST TEST MEANS AMONG CETG, OBRTG, AND CG ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variable	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Explosive power (in centimeter)	Between Groups	34.844	2	17.422	.831	.443
	Within Groups	881.067	42	20.978		
	Total	915.911	44			
Flexibility (in centimeter)	Between Groups	62.978	2	31.489	1.897	.163
	Within Groups	697.333	42	16.603		
	Total	760.311	44			

Table-6

ANALYSIS OF VARIANCE ON POST TEST MEANS AMONG CETG, OBRTG, AND CG ON THE VARIED REGIMENS OF TRAINING PROGRAM ON EXPLOSIVE POWER AND FLEXIBILITY OF INDUSTRIAL TRAINING STUDENTS

Variables	Source of variance	Sum of Squares	df	Mean Square	F
Explosive power (in centimeter)	Between Groups	47.290	2	23.645	9.45
	Within Groups	102.568	41	2.502	
Flexibility (in centimeter)	Between Groups	73.093	2	36.547	14.96*
	Within Groups	100.181	41	2.443	

Table-7

SCHEFFEE'S ADJUSTED POST -HOC MEANS OF CEG, OBETG AND CG OF INDUSTRIAL TRAINING STUDENTS ON EXPLOSIVE POWER (in centimeter)

CEG	OBWTG	CG	M.D	C.I
40.481	41.217	-	0.736	1.649
40.481	-	38.8	-1.712	1.649
40.481	-	38.8	-1.712	1.651

Figure-1

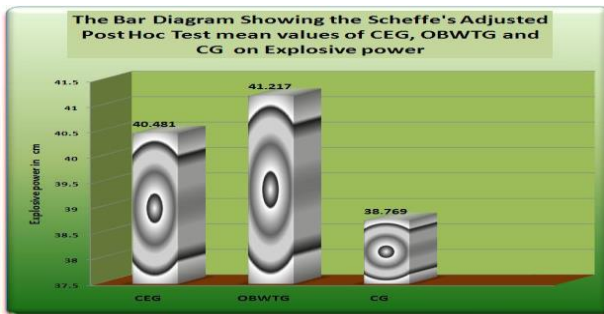
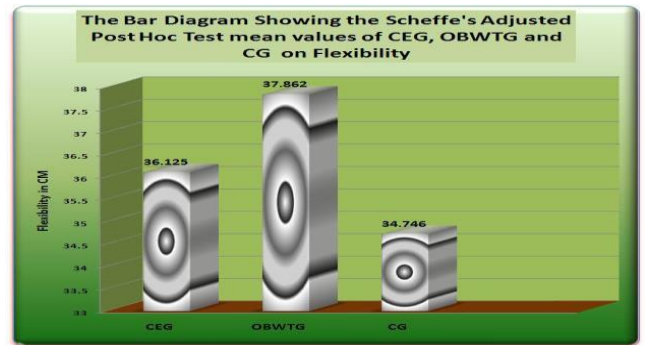


Table-8

SCHEFFEE'S ADJUSTED POST HOC MEANS OF CEG, OBETG AND CG OF INDUSTRIAL TRAINING STUDENTS ON FLEXIBILITY (in centimeter)

CEG	OBWTG	CG	M.D	C.I
36.125	37.862	-	1.737	1.631
36.125	-	34.7	-1.379	1.63
36.125	-	34.7	-1.379	1.631

Figure-2



5. RESULT OF THE STUDY

1. The result of the study shows that the calisthenics exercise training significantly improved explosive power and flexibility of industrial training students.
2. The result of the study shows the own body resistance training significantly improved the explosive power and flexibility of young children.
3. The result of the study shows that the calisthenics exercise training significantly improved better than the own body resistance training, control group explosive power and flexibility of Industrial Training Students.
4. The result of the study shows that the own body resistance training significantly improved better than the control group on explosive power and flexibility of young children.

6. CONCLUSION

It is concluded that the calisthenics exercise training significantly improved the explosive power and flexibility of industrial training students. The own body resistance training significantly improved explosive power and flexibility of young children. The calisthenics exercise training significantly improved better than the own body resistance training, control group on explosive power and flexibility of industrial training students. It was concluded that the own body resistance training significantly improved better than the control group on explosive power and flexibility of young children.

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