



Effects of Circuit Resistance Training on Muscular Strength of Intercollegiate Level Power Lifters, Body Builders and Weight Lifters

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Abstract

The reason for this investigation was to look at muscular strength of intercollegiate male weight lifters, power lifters and body builders. To achieve this purpose eighty healthy male students were randomly selected from R.V.G Engineering college, Mysore, Karnataka. They were divided in to four equal groups. The first group experienced circuit training with weight lifters, the second with power lifters and the third with body builders and the fourth and last group did not experience any particular training. Muscular strength was chosen as needy and it was assessed by 1 RM seat squeeze test. Trial bunches experienced low-volume circuit protection practice with moderate development: 35 % of one-reiteration most extreme (1-RM) and 4 s every one of lifting and bringing down stages. Normal muscular strength perseverance all through the activity session was fundamentally higher with low-force protection practice with ordinary development than with low-volume protection practice with moderate development ($P < 0.05$); in any case, total muscular strength continuance was altogether more noteworthy in low-volume protection practice with moderate development than in alternate trials. The aftereffects of this investigation propose that low volume circuit protection training with moderate development fundamentally enhanced for weight lifters, power lifters and body builders.

Keywords: Circuit Resistance Training for Weight Lifters-(CRTFWL), Circuit Resistance for Power Lifters-(CRTFPL), Circuit Resistance /Training For Body Builders-(CRTFBB), Control Group- CG; Muscular Strength- (MS), weight lifters, power lifters and body builders.

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Introduction

Weightlifting, additionally called Olympic-style weightlifting, or Olympic weightlifting, is an athletic train in the cutting edge Olympic program in which the competitor endeavors the most extreme weight single lift of a barbell stacked with weight plates. The two rivalry lifts all together are the grab and the quick lift. Muscularity, and molding. Bodybuilders get ready for rivalries through a blend of purposeful drying out, end of superfluous body fat, and sugar stacking to accomplish most extreme vascularity, and in addition tanning to highlight muscular definition. Bodybuilders may utilize anabolic steroids to manufacture muscles.

Methodology

The reason for the investigation was to discover the impacts of circuit protection training program on muscular strength of entomb university level weight lifters, power lifters and body builders. To satisfy the motivation behind the examination eighty male entomb

university players were arbitrarily chosen from SDM College Ujjire in Karnataka State. The subjects were allowed to pull back their assent in the event of feeling any distress amid the time of their cooperation. Yet there was no dropout amid the investigation. Enlightening measurements, for example, mean and standard deviation were found with a specific end goal to get essential thought of the information conveyance. 't' test improved the situation discovering whether there was any measurably critical contrasts in the particular factors of every group. 0.05 level of certainty was settled for muscular strength to test the level of essentialness.

Result of the Study

Criterion variables of were presented in tables.

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Table 1

Variables		Mean± S. D	S.E.M	M.D	't' ratio
Muscular Strength	PRE-TEST	40.03± 1.57	0.40	4.57	12.63*
	POST-TEST	44.60±1.49	0.38		

Significant at 0.05 levels

Table-1 shows the obtained 't' ratio's for pre and post test mean difference in the selected variable of (12.63) on muscular strength respectively for the weight lifters. The obtained t ratio was higher than the table

value of 2.14 and degrees of freedom (1,14). The results showed significant improvement on muscular strength endurance of weight lifters.

Table 2

Variables		Mean± S. D	S.E.M	M.D	't' ratio
Muscular Strength endurance (in numbers)	PRE-TEST	39.53± 1.17	0.30	2.06	4.86*
	POST-TEST	41.60± 2.00	0.51		

Significant at 0.05 levels

Table-2 shows the obtained 't' ratio's for pre and post test mean difference in the selected variable of (4.86) on muscular strength respectively for the power lifters. The obtained t ratio was higher than the table

value of 2.14 and degrees of freedom (1,14). The results showed significant improvement on muscular strength endurance of power lifters.

Table 3

Variables		Mean± S. D	S.E.M	M.D	't' ratio
Muscular Strength endurance (in numbers)	PRE-TEST	39.66± 1.14	0.29	6.73	18.97*
	POST-TEST	46.40± 1.63	0.42		

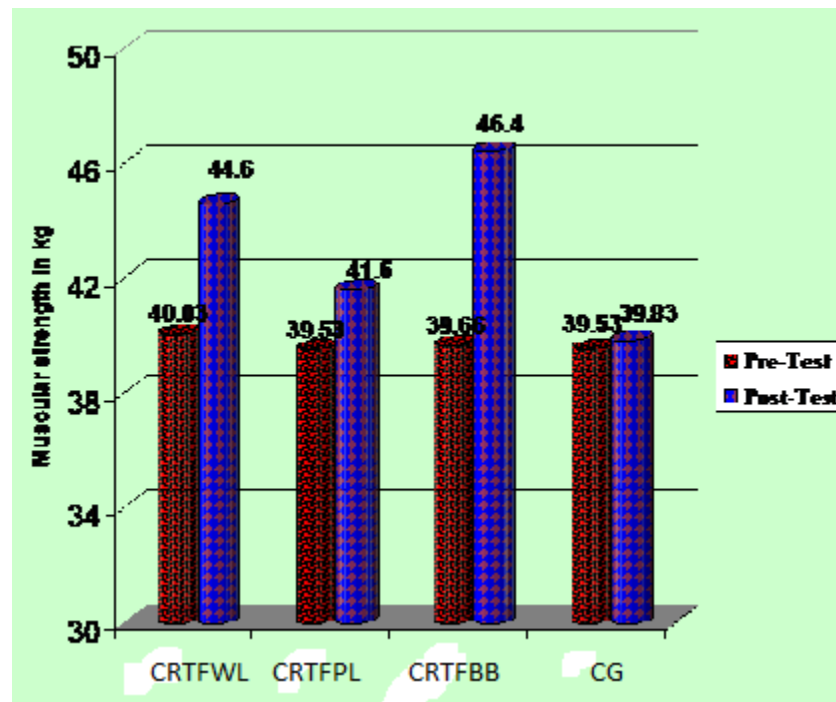
Significant at 0.05 levels

Table-3 shows the obtained 't' ratio's for pre and post test mean difference in the selected variable of (18.97) on muscular strength respectively for the body builders. The obtained t ratio was higher than the table

value of 2.14 and degrees of freedom (1,14). The results showed significant improvement on muscular strength endurance of body builders.

Table 4

Variables		Mean± S. D	S.E.M	M.D	't' ratio
Muscular Strength	PRE-TEST	39.53± 1.07	.27	.3000	2.073
	POST-TEST	39.83± 0.81	.21		



The table shows the mean values of pre, post and adjusted post test of crtfl, crtfl, crtfl and control group on muscular strength.

Table 5

Mean	CRTF WL	CRTFL	CRTFBB	CG	source of variance	sum of square	df	mean square	'f'
Pre-test	40.03	39.53	39.66	39.53	Between group	2.513	3	.838	0.53
					Within group	88.533	56	1.581	
Post – test	44.60	41.60	46.40	39.83	Between group	390.912	3	130.304	54.40 *
					Within group	134.133	56	2.395	
Adjust ed post test	44.36	41.71	46.41	39.94	Between group	364.006	3	121.335	75.00 *
					Within group	88.970	55	1.618	

0.05 level of significance

The Scheffe’s Test for the Differences between Pared Means on Muscular Strength.

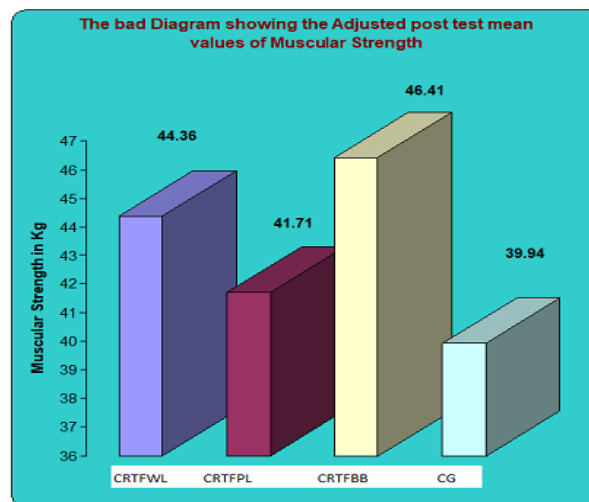
Table 6

CRTFWL	CRTFPL	CRTFBB	CG	Mean Differences	Confidence Interval Value
44.36	41.71	-	-	2.65	1.32
44.36	-	46.41	-	2.05	1.32
44.36	-	-	39.94	5.42	1.32
-	41.71	46.41	-	4.70	1.32
-	41.71	-	39.94	1.77	1.32
-	-	46.41	39.94	6.47	1.32

* Significant at 0.05 level of confidence

Table-6 shows the post hoc analysis of obtained order adjusted post test means. The confidential interval mean difference required to be significant was 1.12. It was observed that the mean difference values of CRTFBB in developing the muscular strength was

significantly higher than the CRTFPL, CRTFWL and control group. The CRTFWL developed the muscular strength better than the CRTFPL and control group. The CRTFPL developed muscular strength better than the control group.



Result

1. It was revealed that circuit resistance significantly improved the muscular strength for the intercollegiate level weight lifters.
2. It was revealed that circuit resistance significantly improved the muscular strength for the intercollegiate level power lifters.
3. It was revealed that circuit resistance significantly improved the muscular strength for the intercollegiate level body builders.
4. It was revealed that circuit resistance body builders had better improvement than weight lifters, power lifters and control group of muscular strength.
5. It was revealed that circuit resistance weight lifters had better improvement than power lifters and control group of muscular strength.
6. It was revealed that circuit resistance power lifters had better improvement than control group of muscular strength endurance.

Conclusion

It is concluded that the body builder has better improvement due to the circuit resistance training of intercollegiate level players.

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