

EFFECTIVENESS OF EXERCISES TRAINING PROGRAMME IN TEARMS OF ABDOMINAL STRENGHT AND FLEXIBILITY OF MALE BOXERS

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Abstract

The purpose of the study was to determine whether eight weeks Exercise Training Programme (ETP) could improve Abdominal Strength and Flexibility of state level boxing players. To achieve this purpose 40 state level boxers belonging to 16 to 19 years age group were selected. These players were divided into two equal groups viz. the Experimental Group (Exercise Training Program Group, N=20) and the Controlled Group (N=20). The Exercise Training Group was imparted training for 6 days a week for 8 weeks, every day for 4 hours (morning 2 hours and evening 2 hours). The data were collected before and after training for both groups. The data was analyzed by using One Way ANCOVA. The result of the study showed that the Exercise Training Program has significantly improved the Abdominal Strength and Flexibility of the boxers of the Experimental Group as compared to the controlled group. The study concluded with the conclusion that the eight weeks Exercise Training Program (ETP) designed by the researcher is found effective for the improvement of Abdominal Strength and Flexibility of male boxers

Keywords: Abdominal Strength, Flexibility, Boxers, Exercise Training Program (ETP).



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INTRODUCTION:

All the combative games are very popular among youth through worldwide nations. Particularly among youth the sports like Karate, Kickboxing, Wrestling, Judo, Taekwondo, etc. are very popular. The present study is concern with the game of boxing. In boxing a boxer needs a good strength of his abdomen as well as flexibility of body in order to fight with the opponent. At the basic stage of learning, sports training of 13-14 years old boxers should maintain the interest in a chosen type sports activity with regard to motivation. This predetermines the necessity of searching for new approaches to the sports training of boxers, finding external and latent properties, abilities and capacities of the organism to achieve future goals in sports. (Lyudmila.D.et al 2017)

Further it has been also noticed that there is a positive impact of boxing training intervention on general and specific physical fitness variables. (Said El-Asheker 2018)

By taking the cognizance of this fact the researcher has designed Exercise Training Program (ETP) and implemented the same for eight weeks in order to see it's effectiveness

for the improvement of the said components of motor fitness and motor performance of male boxers.

MATERIALS AND METHODS

Subjects and Variables

In this Study 40 male boxers of state level belonging to Trimurti Public School, Ahmednagar were selected randomly. The selected subjects were assigned into two groups viz. the Exercise Training Group (N=20) and the Controlled Group (N=20). All subjects were instructed to refrain from participation in other form of training during the testing and training period that might improve their Abdominal Strength and Flexibility. The criterion of this study is Exercise Training Program (ETP). The training was imparted for a period of 8 weeks, 6 days a week and for 96 sessions of 2 hours each (192 hours). The Pre Test and Post Tests were conducted for data collection.

Protocol:

The designed protocol of Exercise Training Program (ETP) consists of 6 days in a week, 4 hours in a day (i.e. Morning 2 hours and evening 2 hours) for period of 8 weeks.

The Training Programme was divided in three periods viz. Preparatory Period (2 weeks), Competition Period (4 weeks) and Transition Period (2 weeks). The Exercise Training Program (ETP) for the improvement of Abdominal Strength and Flexibility. The ETP includes various exercises viz. –Half squat, bench press, heel raise, military press, dumbbell press, pike sit ups with medicine ball, the boxing footwork, high knees, alternate leg lift, bounding, skipping, kneeling as well as selected exercises of weight training. The intensity of exercises was increased in every week as well as by taking into consideration the various periods (phases) as mentioned above.

The Abdominal Strength and Flexibility was measured by using standardized tests viz. Sit Ups Test and Sit and Reach Test, respectively. The tests were conducted for both the group before and after the training programme.

Statistical Technique:

The data collected through Pre Test and Post Test before and after eight weeks Exercise Training Programme was analyzed with the help of standard statistical technique viz. One Way ANCOVA.

RESULTS:

Result on Abdominal Strength

The data were analyzed by following the treatment wise comparison of adjusted mean scores of Abdominal Strength by taking Pre- Abdominal Strength as covariate when measured by Sit Ups Test.

The Adjusted Mean Scores of Abdominal Strength due to Exercise Training Programme, as obtained from ANCOVA test, revealed that –

Table 1: Summary of One Way ANCOVA of Abdominal Strength by taking Pre-Abdominal Strength as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	1	4295.26	4295.26	621.36	p<0.01
Error	37	255.77	6.91		
Total	39				

From Table 1 it can be seen that there is significant difference between mean score of Abdominal Strength of State Level Male Boxers of the Exercise Training Programme Group and the Controlled Group by taking Pre- Abdominal Strength as a Covariate (Fy.x=621.36, df 1/37, p<0.01). Thus, the overall performance of adjusted Mean Scores of Abdominal Strength of the Exercise Training Programme Group which is 64.10 and the Controlled Group is 42.65 are not equal. The said result is also presented in figure 1.

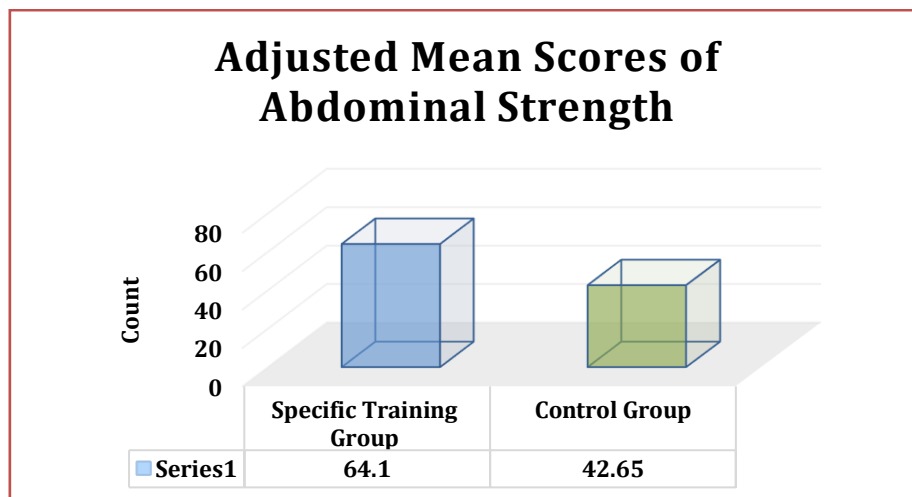


Figure 1: Comparison of Adjusted Mean Scores of Abdominal Strength between Exercise Training Programme Group and the Controlled Group

The above results help to interpret that the Exercise Training Programme is useful in developing Abdominal Strength of State Level Male Boxers significantly when measured by Sit Ups Test.

Result on Flexibility

The data were analyzed by following the treatment wise comparison of adjusted mean scores of Flexibility by taking Pre-Speed as covariate when measured by Sit and Reach Test.

The Adjusted Mean Scores of Flexibility due to Exercise Training Programme, as obtained from ANCOVA test, revealed that –

Table 2: Summary of One Way ANCOVA of Speed by taking Pre-Flexibility as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	1	110.22	110.22	50.26	p<0.01
Error	37	81.31	2.19		
Total	39				

From Table 2 it can be seen that there is significant difference between mean score of Flexibility of State Level Male Boxers of the Exercise Training Programme Group and The Controlled Group by taking Pre-Flexibility as a Covariate ($F_{y,x}=50.26$, $df\ 1/37$, $p<0.01$). Thus, the overall performance of adjusted Mean Scores of flexibility of the Exercise Training Programme Group which is 33.10 and the Controlled Group is 28.50 are not equal. The same results are presented in figure 2.

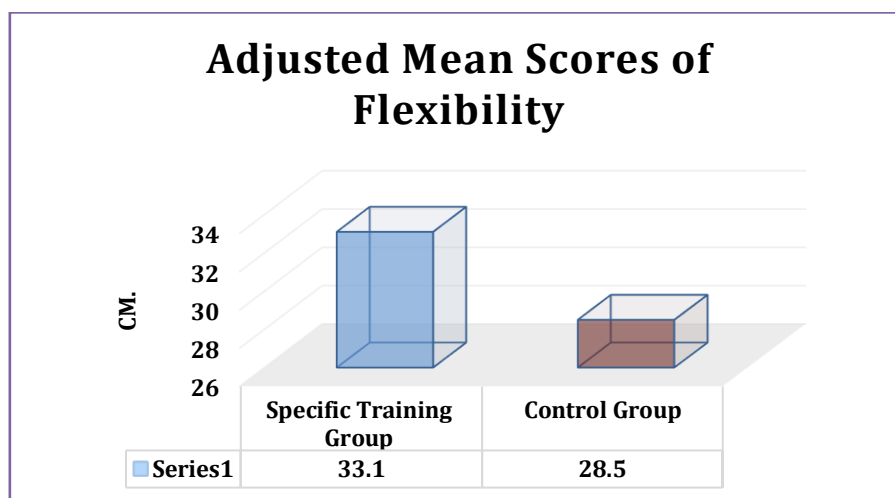


Figure 2: Comparison of Adjusted Mean Scores of Flexibility between Exercise Training Programme Group and the Controlled Group

The above results helps to interpret that the Exercise Training Programme is useful in developing Flexibility of State Level Male Boxers significantly when measured by Sit and Reach Test.

DISCUSSION ON FINDINGS:

The aim of this research was to investigate the effect of eight weeks Exercise Training Program on Abdominal Strength and Flexibility of state level boxers. In the present study the improvement was noticed in the Experimental Group in case of both the variables. This findings are also in accordance with the earlier similar research studies conducted by Alan Ruddock.et al (2018), et al (2006) Ruddock, A. D(2016), Strelnikov (2006), Mouelhi Guizani S. et al (2006), Shulika, Y.A. (2009), SAED El-Asher (2018) and Lyudmila D.Nazareko et al., Buchheit, M. (2008)Thus the study contributes to the existing knowledge pertaining to the training of players in the game of boxing.

CONCLUSION

It is concluded that the Exercise Training Program designed by the researcher is significantly contributing to the improvement of Abdominal Strength and Flexibility of Male state level boxers.

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