

COMPARATIVE EFFECT OF SAQ AND CIRCUIT TRAINING PROGRAMME ON SELECTED PHYSICAL FITNESS VARIABLES OF SCHOOL LEVEL KHO -KHO PLAYERS

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Abstract:

The purpose of this study was determine comparative effect of SAQ and CIRCUIT training programme on selected physical fitness variables of school level male Kho-Kho players. (Age 14 to 16 year) 90 player selected of the Nanded city were randomly assigned in to three group exp. Group A. SAQ training Exp. B. Circuit training and control group. Exp. Group A underwent a SAQ training programme of selected exercises; exp group B received a Circuit training programme selected exercises. All these training programme were imparted a total period of 8 weeks. The following criterion measures were chosen for testing hypothesis. The speed was measured by using 50 yards run the unit of measurement was in 1/100 seconds. The leg explosive strength was measured by standing broad jump and the unit of measurement was in meters. The muscular strength endurance was measured by bent knee set-ups and the unit of measurement was in counts. The power endurance was measured by push-ups and the unit of measurement was in counts. The agility was measured by Shuttle run test and the unit of measurement was in seconds. ANOCOVA followed by scheff's Post hoc test were applied for data analysis. The following conclusion was drawn i.e. SAQ training group showed significant superiority over the Circuit training group in improving Muscular power endurance (CD=0.36, $p<0.05$). The selected training interventions did not show any significant difference in Abdominal muscles strength (CD=0.10, $p>0.05$). This indicates that both SAQ and Circuit training are equally effective to improve abdominal muscles strength. SAQ training group showed significant superiority over the Circuit training group in improving agility (CD=0.50, $p<0.05$). The selected training interventions did not show any significant difference in improves Explosive strength of legs. (CD=0.08, $p>0.05$). This indicates that both SAQ and Circuit training are equally effective to improve Explosive strength of legs. SAQ training group showed significant superiority over the Circuit training in improving speed (CD=0.40, $p<0.05$).

KEYWORDS:

SAQ training and Circuit training – Physical fitness.

INTRODUCTION

Physical education and sports is an inseparable part of whole system of education in today's life. In the curriculum of school education contains many sports activities along with Kabaddi and Kho-Kho as we know that Kabaddi and kho-kho are the Indian soil, games. Kho-Kho is the most popular among the indigenous activities in school, the competitions kho- kho held at school level to international levele. Since the participating in these game suplimate one's energy for evolving happiness and joy, along with maintenance of good level of health and fitness. It has been popularly accepted among the common mass. Kho- Kho is purely and simply an Indian game which has been played in this country from ancient times. The

game is very interesting and exciting in nature both of players and spectators. It is very strengthen and fast games. It is simple its form an art then some time it improves physical and motor fitness agility, explosive strength of feet, speed, stamina, strength of abdominal muscles and cardio vascular endurance. Kho-Kho is the very different for other. game. Playing skill and strategy is difference.

Training has been an integral part of human lineage since times immemorial. It denotes the process of preparation for some task. The preparation of a sportsman represents a multifaceted process of purposeful activity. It is a complex combination of factors which help in the development of sportsman and ensures basic level that determines his sports performance ability (Wilber Randall. L. 2004) "Sports training aims at achieving high level performance in sports competitions. It is a process which is spread over a long period of time and is a competition cum performance oriented endeavor as well". (Hardayal Sing, 1984)

SAQ programmes break speed down into three main areas of skills speed, agility and quickness. These wonderful acts of speed, agility and quickness are what make the different between winning and losing. Often thought to be god given gifts and therefore neglected on the training field. The SAQ programme for Kho -Kho is the specific programme designed to develop these key skills. The programme also has other significant benefits such as improving eye hand and foot co-ordination, strength and explosive power, as well as being full of variety and great fun.

Circuit training program consists of a number of 'stations' where a given exercise is performed usually within a specified time. Once the exercise is completed at one station, the trainee moves rapidly to the next station, performing another exercise also within a prescribed time period. The circuit is completed the an exercises performed after over at all stations.

SAQ and Circuit training the improvement in human health and Physical fitness, a simultaneous experiment to compare both SAC and Circuit training for health and fitness benefit was strategically planned in this study, entitled, "comparative effect of SAQ and CIRCUIT training programme on selected physical fitness variables of school level Kho-Kho players."

MATERIALS AND METHOD

Design of the study

The investigator has used a parallel group method of true experimental design that consists of one control group and two experimental groups.

Population / sampling

The investigation was carried out the 90 school level male Kho-Kho players Aged 14 to 16 year were selected from the Nanded city.

Subject- Selected above subjects were randomly assigned in to three group i.e. exp. Group A. SAQ training Exp. B. Circuit training and control group.

The Experiment

After the pre-test with Physical fitness test Exp. Gr. A underwent a training SAQ programme of selected exercise, Exp. Gr. B. received a Circuit training programme of selected exercises, whereas the Control group did not participate in any of the above training programme.

SAQ training programme to the subjects of the Exp. Gr. A has been imparted for 60 minutes in the morning and Circuit training to Exp. Gr.B for 60 minutes in the evening on the same day. All these training programmes were imparted three days in a week except Sunday and holidays for a total period of 8 weeks. The subjects of the control group neither participated in SAQ training programme nor to the Circuit training.

After the experimental period is over, the subjects of all the groups were post-tested with the Physical fitness Tests.

Variables

Speed: - was measured by using 50 yards run the unit of measurement was in 1/100 seconds.

Explosive strength of leg: - was measured by standing broad jump and the unit Of measurement was in meters.

Muscular strength endurance of abdomen: - was measured by bent knee set-ups and the Unit of measurement was in counts.

Power endurance: - was measured by push-ups and the unit of measurement Was in counts.

Agility: - was measured by Shuttle run test and the unit of measurement was in Seconds.

2) Independent Variables

A set of selected SAQ exercises training programme for Experimental Group A And set of selected Circuit training programme for Experimental Group B was considered as the independent variables for this study.

Statistical Procedure The data collected were analyzed primarily by the descriptive statistics. Further, looking towards the nature of design of the present study, ANCOVA followed by Scheffe's post hoc test were applied for data analysis.

RESULTS

Results on Physical Fitness Variables

Result on Muscular power endurance

SAQ training showed significant improvement in Muscular power endurance (CD=0.63, $p<0.05$).

Circuit training also helped to improve Muscular Power endurance (Dynamic) (CD=0.42, $p<0.01$).

Controlled subjects did not show any change in Muscular Power endurance) (CD=0.06, $p>0.05$).

SAQ training group showed significant superiority over the Circuit training group in improving Muscular power endurance (CD=0.36, $p<0.05$).

Result on Abdominal Muscles Strength

SAQ training could show improvement in Abdominal muscles strength (CD=0.64, $p<0.01$).

Circuit training also showed similar result like SAQ training on Abdominal muscles strength (CD=0.62, $p<0.01$).

For controlled subjects the scores of Abdominal muscles strength were unaffected (CD=0.10, $p>0.05$).

Finally, the selected training interventions did not show any significant difference in Abdominal muscles strength (CD=0.10, $p>0.05$). This indicates that both SAQ training and Circuit training are equally effective to improve abdominal muscles strength.

Result on Agility

SAQ training showed significant improvement in agility (CD=0.62, $p<0.05$).

Circuit training also helped to improve agility (CD=0.40, $p<0.01$).

Controlled subjects did not show any change in agility scores (CD=0.08, $p>0.05$).

SAQ training group showed significant superiority over the Circuit training group in improving agility (CD=0.43, $p<0.05$).

Result on Explosive Strength of Legs

SAQ training showed significant improvement in Explosive strength of legs (CD=0.74, $p<0.05$).

Circuit training also helped to improve Explosive strength of legs (CD=0.72, $p<0.01$).

Controlled subjects did not show any change in Explosive strength of legs (CD=0.09, $p>0.05$).

Finally, the selected training interventions did not show any significant difference in Explosive strength of leg (CD=0.07, $p>0.05$). This indicates that both SAQ traing and Circuit training are equally effective to improve Explosive strength of legs.

Result on Speed

SAQ training showed significant improvement in speed (CD=0.75, $p<0.05$).

Circuit training also helped to improve speed (CD=0.60, $p<0.01$).

Controlled subjects did not show any change in speed (CD=0.06, $p>0.05$).

SAQ training group showed significant superiority over the Circuit training group in improving speed (CD=0.45, $p<0.05$).

FINDINGS

.Analysis of physical fitness variables revealed that –

SAQ training group showed significant superiority over the Circuit training group in improving Muscular power endurance (CD=0.41, $p<0.05$).

Finally, the selected training interventions did not show any significant difference in Abdominal muscles strength (CD=0.10, $p>0.05$). This indicates that both SAQ and Circuit training are equally effective to improve abdominal muscles strength.

SAQ training group showed significant superiority over the Circuit training group in improving agility (CD=0.50, $p<0.05$).

Finally, the selected training interventions did not show any significant difference in improves Explosive strength of legs. (CD=0.08, $p>0.05$). This indicates that both SAQ and Circuit training are equally effective to improve Explosive strength of legs.

SAQ training group showed significant superiority over the Circuit training in improving speed (CD=0.40, $p<0.05$).

CONCLUSION

SAQ Training and Circuit training helps better to improve abdominal muscles strength , power endurance, explosive strength of legs, speed and agility

Thus, both SAQ training and circuit training are complimentary to each other to improve almost all the selected fitness variables of school level kho- kho players.

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