

## 5.1 Summary

Kho-Kho is a fast-paced game that demands agility and quick reflexes due to its fast rotations, fast play in both chasing and defending. While leg strength, endurance, rapid sit-ups, attention, and presence of mind are required for the game. Speed and agility are the physical fitness qualities that are thought to be more significant than the other elements. The reviews showed that the participants' physical fitness and level of physiological parameters had been impacted by the resistance circuit and interval training regimens. Numerous investigations have been conducted regarding the distinct impacts of circuit and interval training. The purpose of this study was to determine how a combination of resistance circuit training and intense interval training affected certain physical and physiological characteristics of kho-kho players.

To fulfil the purpose of the study Ninety (N=90) College men Kho-kho players studying in various Colleges affiliated to Veer Narmad South Gujarat University, Surat, Gujarat were randomly selected as subjects. Their age ranged from 18 to 25 years. The subjects were divided at random into three groups of thirty each (n=30). Group - I underwent resistance circuit Training, Group - II underwent Intensive Interval Training, and Group - III acted as the Control group. Every subjects underwent pre-tests on a range of physical and physiological characteristics, including speed, agility, flexibility, explosive power, blood pressure, resting heart rate and vital capacity. For eight weeks, the experimental groups engaged in their corresponding resistance circuit training and intense interval training. After eight weeks of training on all three groups; the experimental group - I, the experimental group - II, and the control group, post-tests were administered on the aforementioned dependent variables. The data collected from the three groups before and immediately after the training program were statistically analysed on the selected criteria variables with Analysis of Covariance (ANCOVA). as long as the "F" ratio for adjusted post-test means was significant, Scheffe's post hoc test was followed to determine which of the paired mean differences was significant. In all cases, a confidence level of ( $p < 0.05$ ) was set to test the hypothesis.

## 5.2 Conclusions

Within the constraints and parameters of this investigation, the following conclusions were reached based on the data presented and the conversations held.

1. Resistance circuit training and intensive interval training were the two experimental groups that showed the significant improvements in terms of speed, endurance, agility, flexibility, explosive power, resting pulse rate, vital capacity, and systolic and diastolic blood pressure.
2. In every one of the selected variables, speed, endurance, agility, flexibility, explosive power, resting pulse rate, vital capacity, and systolic and diastolic blood pressure; significant differences in performance were observed between resistance circuit training and intensive interval training.
3. In every one of the selected criterion variables—speed endurance, cardio respiratory endurance, endurance, muscular endurance, leg strength, heart rate, vital capacity, and systolic and diastolic blood pressure—significant differences in performance were observed between resistance circuit training and intensive interval training.
4. The resistance circuit training group demonstrated a significant increase in explosive power compared to the rigorous interval training group.
5. Among kho-kho players, the control group did not exhibit any statistically significant improvement in any of the selected physical and physiological variables.

### **5.3 Recommendations**

The following recommendations are given in light of the research's findings, discussions, and results.

1. Resistance circuit training and intense interval training were found to have a significant impact on all criteria variables in the current investigation. Therefore, in order to enhance the overall performance of male kho-kho players, it is advised that coaches, trainers, and physical educators implement this training.
2. The same training may be used to increase performance in different games and sports since the selected trainings demonstrated a higher degree of improvement on the selected variables.
3. Other bio-chemical, physiological and physical fitness factors may be included to a study using a similar research design.

4. Similar studies could be conducted over longer time periods or with training intensities other than those described in the current study.
5. It is recommended that similar study may be conducted among state and national level kho-kho players to assess their level in the selected variables.
6. It is recommended that you continue the same investigation with a larger sample size.
7. It might be possible to do a similar study using female athletes as the subjects.
8. Similar studies could potentially be carried out with different dependent variables.