



EFFECT OF SPECIFIC TRAINING PROGRAMME ON SELECTED MOTOR QUALITIES OF MEN TENNIS PLAYERS

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ABSTRACT:-

The study was to find out the effect of specific training programme on selected motor qualities of men tennis players. To achieve the purpose of the study, thirty college level tennis players (n= 30) from SRKV Maruthi College of Physical Education and faculty of GAPEY, Ramakrishna Mission Vivekananda Educational and Research Institute, Coimbatore were selected as subjects. Their age are ranged from 18 to 25 years. All the subjects were divided in to two groups with 15 subjects each as experimental and control group. Group-I underwent specific training for a period of twelve weeks of five days per week and group-II acted as control who did not participate in any special training other than the regular routine. The motor qualities such as cardio respiratory endurance and agility were selected as dependent variables. Cardio respiratory endurance was tested by cooper 12 minutes run/walk test in distance and agility was tested by semo agility test in seconds. Pre and post test random group design was used for this study. The dependent 't' test was applied to determine the difference between the means of two group. To find out whether there was any significant difference between the experimental and control groups on adjusted post test means the analysis of covariance was used. To test the level of significant of difference between the means 0.05 level of confidence was fixed. The result of the study shows that, there was a significant improvement takes place on cardio respiratory endurance and agility of college level tennis players due to the effect of twelve weeks of specific training. And also concluded that, there was a significant difference exists between experimental and control groups on cardio respiratory endurance and agility. The control group did not improve the selected criterion variables.

KEYWORDS: specific training, cardio respiratory endurance, agility.

INTRODUCTION :

The history of tennis dates back several thousand years. The game was first created by European monks to be played for entertainment purposes during religious ceremonies. Tennis is a sport played between two players (singles) or between two teams of two players each (doubles). The modern game of tennis originated in the united kingdom in the late 19th century as "lawn tennis" Tennis is an Olympic sport and is played at all levels of society at all ages. The sport can be played by anyone who can hold a racket, including people in wheelchairs. Tennis is played by millions of recreational players and is also a popular worldwide spectator sport. The four Grand Slam tournaments (also referred to as the "Majors") are especially popular: the Australian Open played on hard courts, the French Open played on red clay courts, Wimbledon played on grass courts, and the US Open played also on hard courts. The purpose of the study is to investigate "the effect of specific



training programme on selected motor qualities of men tennis players" (Thomas Reilly, 1990)

STATEMENT OF THE PROBLEM

The study was aimed at to find out the effect of specific training programme on selected motor qualities of men tennis players

METHODOLOGY

The study was aimed at to find out the effect of specific training programme on selected motor qualities of men tennis players. To achieve the purpose of the study, thirty college level tennis players ($n = 30$) from SRKV Maruthi College of Physical Education and faculty of GAPEY, Ramakrishna Mission Vivekananda Educational and Research Institute, Coimbatore were selected as subjects at random. Their age are ranged from 18 to 25 years. All the subjects were divided in to two groups with 15 subjects each as experimental and control group. Group-I underwent specific training for a period of twelve weeks of five days per week and group-II acted as control who did not participate in any special training other than the regular routine. The motor quality variables such as cardio respiratory endurance and agility were selected as dependent variables. Cardio respiratory endurance was tested by cooper 12 minutes run/walk test in distance and agility was tested by semo agility test in seconds. Pre and post test random group design was used for this study. The dependent 't' test was applied to determine the difference between the means of two group. To find out whether there was any significant difference between the experimental and control groups on adjusted post test means the analysis of covariance was used. To test the level of significant of difference between the means 0.05 level of confidence was fixed.

ANALYSIS OF DATA

The collected data were statistically analyzed and presented in the following tables.

TABLE – I
THE SUMMARY OF MEAN AND DEPENDENT 'T' TEST FOR THE PRE AND POST TESTS ON CARDIO RESPIRATORY ENDURANCE AND AGILITY OF EXPERIMENTAL GROUP AND CONTROL GROUP

S.No	Variables	Group	Pre test mean \pm SD	Post test mean \pm SD	M. D	SEM	't'-ratio
1	Cardio respiratory Endurance	Experimental group	2279.46 \pm 232.97	2407.62 \pm 185.14	128.16	14.64	8.76*
		Control group	2252.44 \pm 218.16	2250.78 \pm 218.63	1.66	1.10	1.51
2	Agility	Experimental group	14.68 \pm 0.46	14.16 \pm 0.47	0.55	0.05	10.96*
		Control group	14.72 \pm 0.78	14.78 \pm 0.82	0.05	0.03	1.97

*Significant at 0.05 level. Table Value = 2.14 with Df (14)

The above table reveals that the obtained t-ratio between pre and post test values of specific training group and control group.

The pre test mean values of cardio respiratory endurance and agility were 2279.46, 2252.44 and 14.68, 14.72 respectively. The post test mean values of cardio respiratory endurance and agility were 2407.62, 2250.78 and 14.16, 14.78 respectively.

The obtained 't' values of specific training group for cardio respiratory endurance and agility were 8.76 and 10.96 respectively. The required table value was 2.14. Since the obtained t-ratios are greater than the table value at 0.05 level of confidence that there were significant difference between pre and post test values.

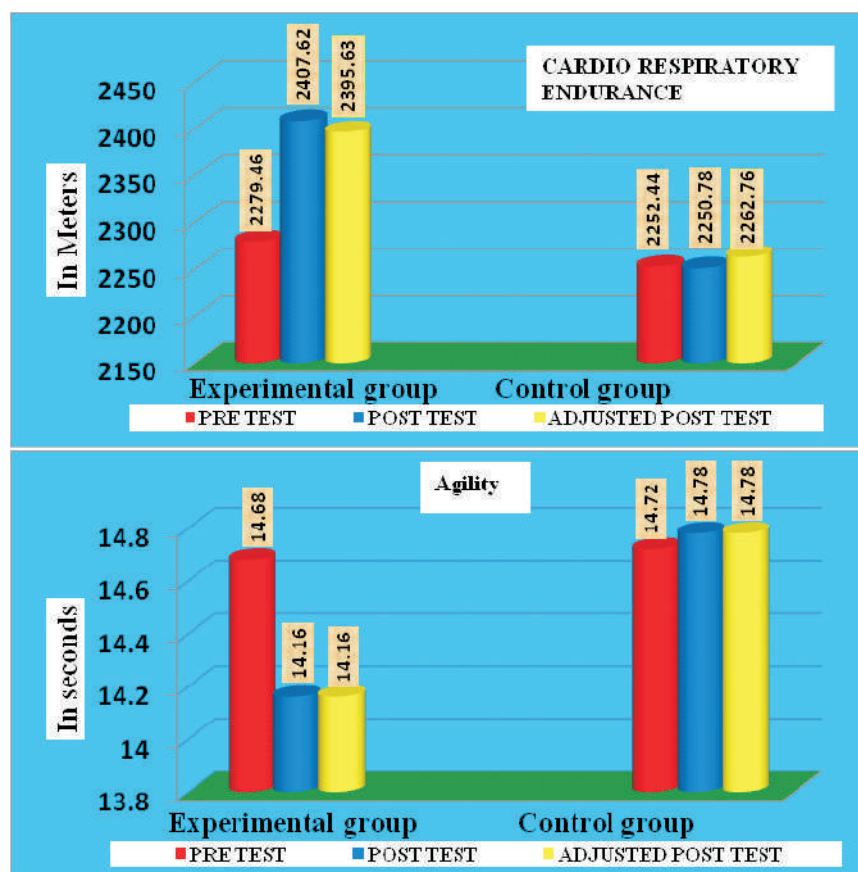
ANALYSIS OF COVARIANCE (ANCOVA) ON CARDIO RESPIRATORY ENDURANCE AND AGILITY OF EXPERIMENTAL GROUP AND CONTROL GROUP

Variables	Experimental group	Control group	Sources of variance	Sum of squares	Df	Mean squares	Obtained F-ratio
Cardio respiratory Endurance	2395.36	2262.76	Between Within	131903.93 27029.19	1 27	131903.93 1001.081	131.76*
Agility	14.16	14.78	Between Within	2.81 1.40	1 27	2.81 0.05	54.20*

*significant 0.05 level (The table value required for significance at 0.05 level with df (1, 27) and 4.21 respectively)

An examination of table – II indicated that the scores of adjusted post-test means of the cardio respiratory endurance and agility of the specific training group and control group were 2395.63, 2262.76 and 14.16, 14.78 respectively. The obtained F-ratio for the adjusted post-test was 131.76 and 54.20 the table F-ratio was 4.21. Hence the adjusted post-test mean F-ratio was significant at 0.05 level of confidence for the degree of freedom 1 and 27.

FIGURE – I
MEAN VALUES OF SPECIFIC TRAINING GROUP AND CONTROL GROUP ON CARDIO RESPIRATORY ENDURANCE AND AGILITY



RESULTS AND DISCUSSION

The result of the study indicated that the experimental group had significantly improved on cardio respiratory endurance and agility. However control group showed insignificant.

The results of the study also indicate that there is a significant mean difference exist between the adjusted post test means of experimental group and control group on cardio respiratory endurance and agility.

The result may in accordance with the following research findings.

There is significant difference found between the means of all selected motor qualities (cardio respiratory endurance shoulder strength and agility).

Fernandez-Fernandez, j, (2012) reported to that 6 weeks of high intensity interval training and repeated sprint training may help to improve such as motor quality variables aerobic fitness, tennis specific endurance and sprint agility.

Keener,M., et al. (2014) reported to that long term strength training had to improved on change of direction. It is inferred from the above literature and from the results of the present study, it is concluded that twelve weeks of specific training improve the cardio respiratory endurance and agility.

CONCLUSION

On the basis of the interpretation of the data, the following conclusion may be drawn.

- ✦ There was a significant improvement takes place on selected motor qualities such as cardio respiratory endurance and agility of college level men tennis players.
- ✦ There was a significant difference exists between experimental group and control group on selected motor qualities such as cardio respiratory endurance and agility.

REFERENCES

- Baiget E, Fernandez-Fernandez J, Iglesias X & Rodrigguez. (2015). Tennis play intensity distribution and relation with aerobic fitness in competitive players. plos one , 10(10):e0131304.
- Baiget E, Fernandez-Fernandez J, Iglesias X, Vallejo L & Rodriguez Fa. (2014). On court endurance and performance testing in competitive male tennis players. journal of strength and conditioning research, 28(1):256-64.
- Bloomfield J, Polman R, O Donoghue P & Mcnaughton L. (2007). Effectiive speed and agility conditioning methodology for random intermittent dynamic type sports. journal of strength and conditioning research, 21(4):1093-100.



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