



ISSN: 2456-0057

IJPNPE 2019; 4(1): 2357-2360

© 2019 IJPNPE

www.journalofsports.com

Received: 18-11-2018

Accepted: 22-12-2018

Dr. Santi Nath Patra

Assistant Professor, C.W.T.T,
N.B.S. Mahavidyalaya Govt.
Aided B.Ed. & B.P.Ed. College,
Bishnupur, Bankura,
West Bengal, India

Effect of specific soccer training programme on performance variables of high fit santal tribal soccer players

Dr. Santi Nath Patra

Abstract

The present study was to determine the effect of specific soccer training programme on performance variables of high fit tribal soccer player. The subjects were male soccer players of 16 to 19 years of age from Onda Block, Dist. Bankura, W.B. For selecting high fit soccer players, AAPER youth fitness tests was administered to one hundred and twenty Santal Tribal soccer players. The soccer players ranged in the order of composite physical fitness score from the highest to the lowest. The first forty was taken as belonging to high fit. The subject were selected and were assigned to one experimental group and one control group with 20 subject in each group. The specific soccer training programme with ball and dynamic skill was given for a period of 10 week. The experimental group was trained upto six day in a week, while the control group continued with their daily routine work. The selected variables were to implement for the study as performance variables i.e. speed explosive strength agility endurance and general soccer ability. The pre and posttest were conducted. After the collection of data ANCOVA was used to identify significant effect of treatment on variables. The level of significant was set at 0.05 level.

Keywords: specific soccer training programme, high fit tribal soccer players, performance variables

Introduction

Training in games and sports is no longer a myth and does not have a casual approach; it provides opportunities for scientific process and verification. Training has been accepted as a highly specialized science. Training is not a recent discovery. In ancient times, people were systematically trained for military and Olympic endeavors. Today soccer players prepare themselves for a goal through systematic training. Performance variables play a vital role for soccer players to give high performance.

Soccer players must possess acceleration Speed, Speed of movement, Reaction time, changing of body position, Execution of soccer skill effectively, Long term load bearing capacity of muscle, Cardio-respiratory endurance and Mastery over the controlling the ball and measured kicks. There is no doubt regarding the contribution of these to bring about better performance on soccer performance.

Objective of the study

- To find out the effect of specific soccer training programme on performance variables of high fit tribal soccer players.

Methodology

120 male tribal soccer players were studied from Ramsagar Anchal, Onda Block, Dist. Bankuraas subject for this study who were ranged from 16 to 19 years of age. The entire soccer players were ranked in order to their composite physical fitness scores from highest to lowest. The first forty of them were included for the study as high fit tribal soccer player. Further selected forty subject were subdivided into experimental group and control where 20 subjects in each group. Performance variables were consisting of the parameters which were speed, Explosive strength, Agility, Cardio Respiratory Endurance and General soccer. Ability 50mt dash. Standing Broad Jump, 4x10mt shuttle Run, 12min Run walk Test, volleying skill were used as criterion measure respectively.

Corresponding Author:

Dr. Santi Nath Patra

Assistant Professor, C.W.T.T,
N.B.S. Mahavidyalaya Govt.
Aided B.Ed. & B.P.Ed. College,
Bishnupur, Bankura,
West Bengal, India

The training programme was composed with soccer related physical fitness, soccer skill in dynamic condition and deep passes game practice as playing ability. In the first two weeks of training session, 20 minutes for physical fitness, 25 minutes for soccer skill training and 30 minutes for playing ability of each soccer player were affixed. While 5 minutes duration of time was enhanced for each of the training items i.e physical Fitness, soccer skill and playing Ability in every after two weeks till the end of training programme. Prior to the commencement of each training, 5 minutes warming up programme was exercised. Two minutes time as active rest was adopted in between warm-up, physical fitness, soccer skill and playing ability. Stimulus of intensity, density, duration frequency and volume of load were adjusted according to the ability of the subject. The principal of "Worthwhile Load" was fully utilized.

Specific soccer training programme of 10 week duration was employed on experimental group only, while the control group subjects led there usual and normal daily routine programme. The initial test were conducted followed by 10 weeks of specific soccer training programmes. After

completion of the specific soccer training programme, the final test were conducted.

Result

To determine whether experimental treatment was effective in bringing about change in performance variables or not. ANCOVA was used to analysis of data per training to this study are presented in the following tabels and graphical representation also shown hare with.

Table 1: Analysis of co-variance of the means of high fit Exp. and Cont. group tribal soccer player in speed

| Mean | Exp. Gr. | Cont. Gr | Sum of Square | Df | Mean S.S. | 'F' ratio |
|-----------|----------|----------|---------------|--------|-----------|-----------|
| Pre Test | 7.400 | 7.415 | A | 0.0026 | 1 | 0.0025 |
| | | | W | 4.3097 | 38 | 0.1134 |
| Post Test | 7.363 | 7.418 | A | 0.0297 | 1 | 0.297 |
| | | | W | 4.2765 | 38 | 0.1125 |
| Adjusted | 7.371 | 7.410 | A | 0.0151 | 1 | 0.0151 |
| | | | W | 0.1834 | 37 | 0.0049 |

*Significant at 0.05 level F 0.05 (1, 38) = 4.10 F 0.05 (1, 37) = 4.10



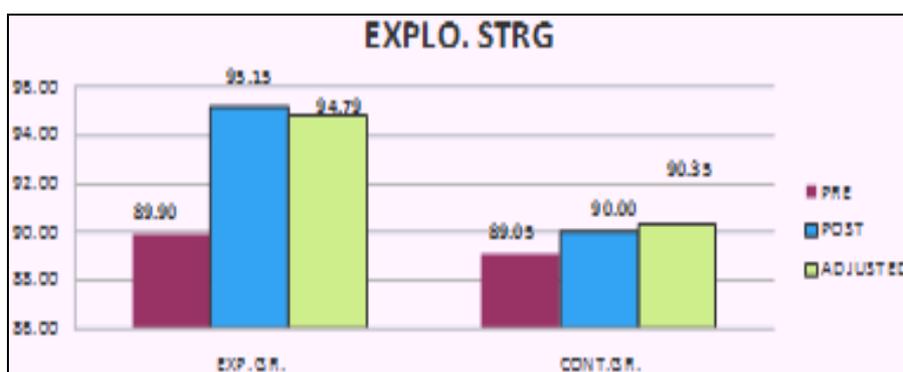
Diagram 1: Speed

As shown in Table-1 that insignificant values of 'F'-ratio were obtained for all the comparison of Pretest Means

(0.022), Post Test Means (0.263), Adjusted Means (3.051), the obtain value was lesser than the table value (4.10).

Table 2: Analysis of co-variance of the means of high fit Exp. and Cont. Group tribal soccer layer in explosive strength.

| Mean | Exp. Gr. | Cont. Gr | Sum of square | Df | Mean S.S. | 'F' ratio |
|-----------|----------|----------|---------------|---------|-----------|-----------|
| Pre Test | 89.90 | 89.05 | A | 7.22 | 1 | 7.22 |
| | | | W | 3002.75 | 38 | 79.02 |
| Post Test | 95.15 | 90.00 | A | 265.22 | 1 | 265.22 |
| | | | W | 2426.55 | 38 | 63.86 |
| Adjusted | 94.79 | 90.35 | A | 196.53 | 1 | 196.53 |
| | | | W | 322.92 | 37 | 8.73 |



*Significant at 0.05 level F 0.05 (1, 38) = 4.10 F 0.05 (1, 37) = 4.10

Diagram 2: EXPLO. STRG

Table-2 shows that obtained 'F' value of Pre Test Means (0.09) was lesser than Table value (4.10). Hence it proved that there was no significant difference between the groups in initial score at 0.05 level. 'F' value of Posttest means (4.15) and Adjusted Post Test means (22.52) were greater table 'F' which indicated that there were significant difference between Post Test means and Adjusted Post Test Means. Since significant difference were recorded, the scores were further subjected to statistical treatment using the LSD Test and result were presented in the table-3.

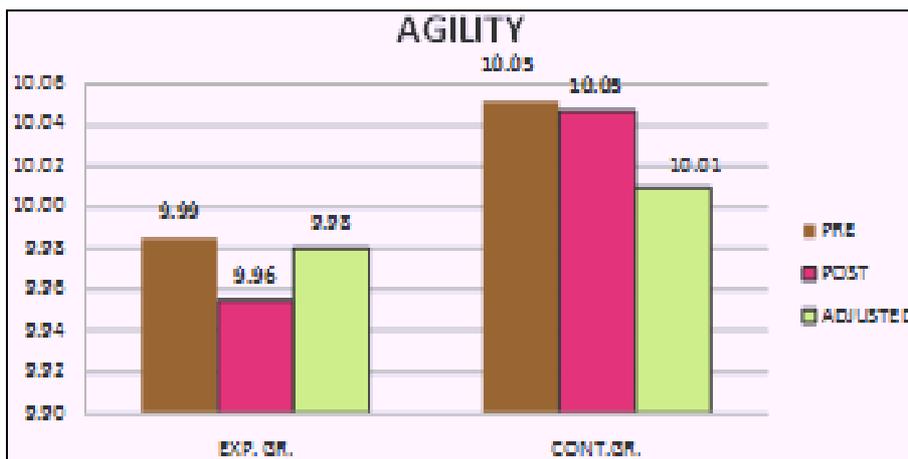
Table 3: Result of LSD test in explosive strength

| Exp. Gr | Cont. Gr | Mean Diff | CD at 5% level |
|---------|----------|-----------|----------------|
| 94.79 | 90.35 | 4.44 | 1.89 |

The results in Table-3 have shown that the mean difference between experimental group and control group have exhibited the significant value of critical difference at the selected level of significance.

Table 4: Analysis of co-variance of the means of high fit exp. and cont. group tribal soccer player in agility

| Mean | Exp. Gr. | Cont. Gr | Sum of Square | | Df | Mean S.S. | 'F' ratio |
|-----------|----------|----------|---------------|-------|----|-----------|-----------|
| | | | A | W | | | |
| Pre Test | 9.99 | 10.05 | A | 0.044 | 1 | 0.004 | 0.54 |
| | | | W | 0.082 | 38 | 0.082 | |
| Post Test | 9.95 | 10.04 | A | 0.084 | 1 | 0.084 | 0.01 |
| | | | W | 3.176 | 38 | 0.083 | |
| Adjusted | 9.98 | 10.01 | A | 0.006 | 1 | 0.006 | 3.91 |
| | | | W | 0.061 | 37 | 0.001 | |



*Significant at 0.05 level $F_{0.05}(1, 38) = 4.10$ $F_{0.05}(1, 37) = 4.10$

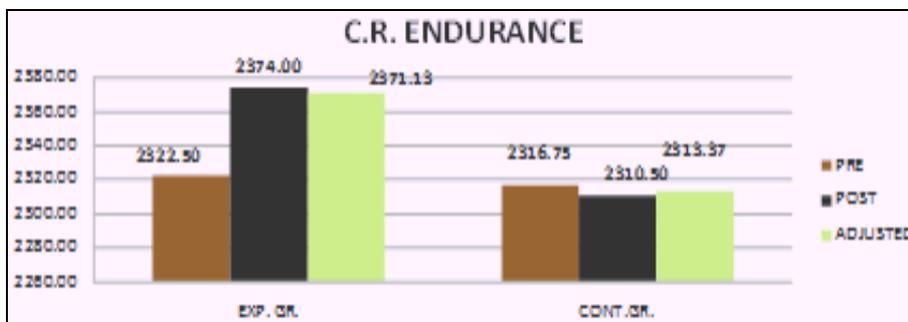
Diagram 3: Agility

Table-4 shows that insignificant values of 'F'-ratio were found for the comparison of Pre Test means (0.54), Post Test

Means (0.01). Adjusted Means (3.91), the obtain value was lesser that the table value (4.10).

Table 5: Analysis of Co-variance of the means of high fit Exp. and Cont. group tribal soccer player in C.R. endurance.

| Mean | Exp. Gr. | Cont. Gr | Sum of Square | | Df | Mean S.S. | 'F' ratio |
|-----------|----------|----------|---------------|-----------|----|-----------|-----------|
| | | | A | W | | | |
| Pre Test | 2322.50 | 2316.75 | A | 330.625 | 1 | 330.625 | 0.013 |
| | | | W | 910338.80 | 38 | 23956.28 | |
| Post Test | 2374.00 | 2310.5 | A | 40322.50 | 1 | 40322.5 | 1.640 |
| | | | W | 934225.00 | 38 | 2484.87 | |
| Adjusted | 2371.13 | 2313.37 | A | 33350.6 | 1 | 33350.6 | 45.37* |
| | | | W | 27195.74 | 37 | 735.019 | |



*Significant at 0.05 level $F_{0.05}(1, 38) = 4.10$ $F_{0.05}(1, 37) = 4.10$

Diagram 4: C.R. Endurance

Table-5 shows that obtained 'F' Value of Pre Test Means (0.013) and Posttest means (1.640) were lesser than Table value (4.10). Hence it proved that there was no significant difference between the groups at 0.05 level "F" value of and Adjusted Post Test means (45.37) was greater than table "F" which indicated that there was significant difference between

Adjusted Post Test means. Since significant difference were recorded, the score were further subjected to statistical treatment using the LSD Test and result were presented in the Table-6.

Table 6: Result of LSD test in C.R. endurance

| Exp. Gr | Cont. Gr | Mean Diff | CD at 5% level |
|---------|----------|-----------|----------------|
| 2371.13 | 2313.37 | 57.76 | 17.32 |

The result in Table-6 have shown that the mean difference between experimental group and control group have exhibited the significant value of critical difference at the selected level of significance.

Table 7: Analysis of co-variance of the means of high fit exp. and cont. Group tribal soccer player in G. Soccer ability

| Mean | Exp. Gr. | Cont. Gr | Sum of Square | Df | Mean S.S. | 'F' ratio |
|-----------|----------|----------|---------------|--------|-----------|-----------|
| Pre Test | 18.70 | 18.80 | A | 0.1 | 1 | 0.1 |
| | | | W | 209.4 | 38 | 5.510 |
| Post Test | 19.85 | 19.00 | A | 7.225 | 1 | 7.225 |
| | | | W | 186.55 | 38 | 4.909 |
| Adjusted | 19.89 | 18.96 | A | 8.570 | 1 | 8.570 |
| | | | W | 65.667 | 37 | 1.774 |

*Significant at 0.05 level $F_{0.05}(1, 38) = 4.10$ $F_{0.05}(1, 37) = 4.10$

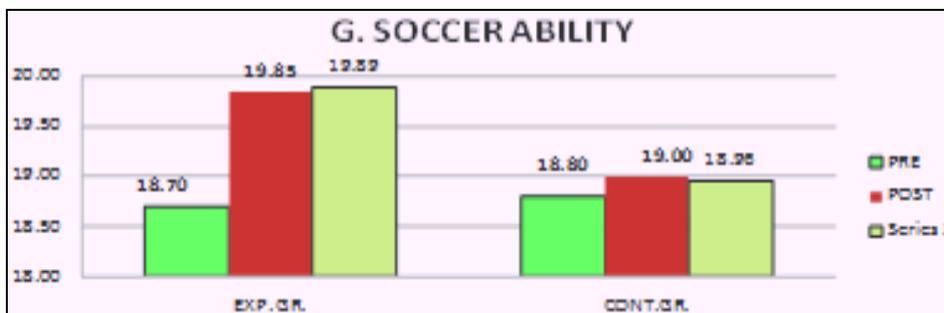


Diagram 5: G. Soccer Ability

Table 7. Shows that obtained 'F' value of pretest means (0.018) and posttest means (1.471) were lesser than Face Value (4.10). Hence it proved that there was no significant difference between the groups at 0.05 level "F" value of and adjusted posttest value 4.83 was greater than table 'F' which indicated that there was which indicated that there was significant difference between adjusted past test means. Since significance difference were recorded, the score were further subjected to statistical treatment using the LSD test result were presented in the Table-8.

Table 8: Result of LSD test in general soccer ability

| Exp. Gr | Cont. Gr | Mean Diff | CD at 5% level |
|---------|----------|-----------|----------------|
| 19.89 | 18.96 | 0.93 | 0.85 |

*Significant at 0.05 level

The result in Table-8 have shown that the mean difference between experimental group and control group have exhibited the significant value of critical difference at the selected level of significance.

Discussion

All the significant changes have occurred due to special characteristic of Specific Soccer Programme. Training process consists of exercise which were mostly connected the lower limb. Few exercise of lower limb specially leg muscles are combined with concentric contraction followed by strong eccentric contraction for same muscle which positively contributed on Elasticity and explosive power of the particular muscles and this contribute to enhance leg explosive strength. Full instep kick, high drive kick, kick and stop the ball, deep passing situation which are the part of treatment and dynamic in nature may gear up the leg *Explosive Strength*.

Six days in a week with more than one hours of training with systematic and scientific advancement of load incensement may assume to affirmative effect on Cardio Respiratory endurance of the subjects. Long term higher load bearing capacity also developed the endurance of heart and intercostal muscle which resulted on greater Cardio Respiratory Endurance.

A lion share of the Specific Training Programme is consisted of various types of passing and kicking skill which might be

positively affected on General Playing Skill Ability.

Conclusion

- Ten week Specific Soccer Training Programme is useful to improve Explosive Strength, Cardio Respiratory Endurance and General Soccer Ability of High fit Tribal Soccer Player.
- Ten week Specific Soccer Training Programme is not so positive in Speed and Agility of High fit Tribal Soccer Player.

References

1. Arun Kumar Uppal. Comparative Effects of Two duration Load Methods and Interval Training Method on Cardio Respiratory endurance and Selected Physiological variables, Unpublished Doctor's Thesis, Jiwaji University.
2. Frank Siewert. A Comparison of Some Component of Physical Fitness and Sports Skill of Ninth Grade Boys of Rural, Urban and Parochial Background, Completed Research in Health, Physical Education and Recreation 1963;5:96.
3. Bissel FG. Research Quarterly 1973;44:315.
4. Homravella. International Olympic Academy.
5. Singh H. Science of Sports Training.
6. Giay Dee, Panny. A study of the Effects of Resistance Running on Speed, Strength, Power, Muscular Endurance and Agility, Dissertation Abstract International 1971;31:3937-A.