

EFFECT OF SMALL SIDED GAMES TRAINING ON SPEED AND AGILITY AMONG SOCCER PLAYERS

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ABSTRACT

The purpose of the study was to find out the effect of small sided games training on speed and agility among soccer players. To achieve the purpose of this study, 20 male soccer players are randomly selected as subjects from the The M.D.T Hindu College, Tirunelveli, Tamilnadu, India. Their age ranged from 17 to 20 years. The selected participants were randomly divided into two groups such as Group 'I' underwent small sided games training (n=10) and Group 'II' acted as control group (n=10). Group 'A' underwent small sided games training for five days and one session per day and each session lasted for an hour for six weeks. Control group was not exposed to any specific training but they were participated in regular activities. The data on speed and agility were collected by administering by 30M dash and shuttle run. The pre and post tests data were collected on selected criterion variables prior and immediately after the training programme. The pre and post-test scores were statistically examined by the dependent 't'-test and Analysis of Co-Variance (ANCOVA) for each and every selected variable separately. It was concluded that the small sided games training group had shown significantly improved in speed and agility. However the control group had not shown any significant improvement on any of the selected variables such as speed and agility.

Keywords: *Small sided games training, Speed, Agility, Soccer*

INTRODUCTION

Sports are institutionalized competitive activities that involve vigorous physical exertion or the use of relatively complex physical skills by participants motivated by personal enjoyment and external rewards. Sport is all forms of physical activity which, through casual or organized participation, aim to use, maintain or improve physical fitness and provide entertainment to participants. The word "training" has been a part of human language since ancient times. It denotes the process of preparation for some task. This process invariably extends to a number of days and even months and years. **Bompa, [1997]** view that systematic nature of the training process is reflected adequately by the fact that the various means and methods, load dynamics, training tasks etcetera. are planned in order to achieve short or long term goals, keeping in view the inter-relations of various training elements and cyclic nature of performance development.

Association football is commonly known as football or soccer. One statistics reveals that is played by more than 250 million players in over 200 countries, making it the world's most popular sport [**Association football, 2012**]. Small-sided games are very benefit energy for the participants. Studies have been conducted to show, and observations confirm, that children get more enjoyment and learn more from playing in small-sided games with adapted rules. They get more touches of the ball, learn more quickly and have to make more decisions during the match (greater Concentration is required because the ball is never far away). The children are also much more involved in the game (more movement and practice) and enjoy it much more than playing on a large pitch. Fewer than players on the pitch and smaller teams ensure that each participant gets more individual attention. There are also more goal scoring opportunities (which are what children want) and the goalkeepers are more often in action (except in 4-a-side matches which usually do not have goalkeepers). Children are also more involved in the attacking and defensive movements and in this way they are more often exposed to a wide range of football situations. They enjoy themselves and teach more [**Owen, et al., 2012**].

Statistics back up the benefits of small-sided football compared with 11-a-side football. Some of these statistics show that: Players touch the ball five times more often in 4-a-side football and 50% more in 7-a-side. Players are five times more often in one-against-one situations in 4-a-side football and twice more often in 7-a-side. Goals are scored every two minutes in 4-a-side football on average and every four minutes in 7-a-side.

Goalkeepers are involved in the action two to four times more often in 7-a-side football than in 11-a-side football. The ball is out of play 8% of the time in 4-a-side football, 14% in 7-a-side and 34% in 11-a-side. In small-sided games, each player, Plays all the time, Receives the ball more often. Is always trying to score a goal? Has the freedom to play. Is always encouraged by the coach-educator? Is supported by his/her parents and coach-educators? [Owen, et. al., 2011].

Purpose of the Study

The purpose of the study was to find out the effect of small sided games training on speed and agility among soccer players.

METHODOLOGY

The purpose of this study was to find out the effect of small sided games training on speed and agility among soccer players. To achieve the purpose of the study twenty male soccer players were randomly selected from The M.D.T Hindu College, Tirunelveli, Tamilnadu. Their age ranged from 17 to 20 years. The researcher reviewed the available scientific journals, periodical, magazine, e-resources and research paper. Taking into consideration feasibility criteria, availability of the instrument and relevance of the variable of the present study the following dependent variables namely speed and agility were selected. Similarly small sided games' training was chosen as independent variable. The speed and agility were assessed by 30 m dash and shuttle run respectively. This study was conducted to determine the possibility cause and effects of small sided games training on speed and agility among soccer players. The subjects were divided into two equal group consists of 10 each and named as experimental group (Group-I) and control group (Group-II). Group-I (n=10) underwent small sided games training and Group II acted as control group. The control group was not given any treatment and the experimental group was given small sided games training for five days per week, for a period of six weeks. The related group research design was used in this study. The collected data from the two groups prior to and after the experimental treatments on speed and agility were statistically analyzed by using the statistical technique of dependent 't' test and analysis of covariance (ANCOVA). In all the cases 0.05 level of confidence was fixed as a level of confidence.

RESULT AND FINDINGS

The effects of small sided games training on selected speed and agility parameters were analyzed and presented below.

1. Speed

Table-I
Computation of 't'-Ratio between Pre and pOst test Means of Small Sided Games Training Group and Control Group on Speed (Seconds)

Group	Test	Mean	Standard Deviation	t-ratio
Small sided games Training	Pre test	4.84	±0.10	8.34*
	Post test	4.71	±0.06	
Control Group	Pre test	4.89	±0.14	1.03
	Post test	4.87	±0.11	

*Significant at 0.05 level.

The table-I shows that the pre-test mean value of small sided games training group and control group are 4.84 and 4.89 respectively and the post test means are 4.71 and 4.87 respectively. The obtained dependent t-ratio values between the pre and post test means of small sided games training group and control group are 8.34 and 1.03 respectively. The table value required for significant difference with df 9 at 0.05 level is 2.26. Since, the obtained 't' ratio value of small sided games training group was greater than the table value, it is understood that small sided games training group had significantly improved the speed. However, the control group has not improved significantly. The 'obtained t' value is less than the table value, as they were not subjected to any specific training.

Table-II
Analysis of Covariance on Speed of Small Sided Games Training Group and Control Group

Adjusted Post Test Means		Source of variance	Sum of squares	df	Mean square	F - ratio
Small sided games Training Group	Control Group	Between	0.02	1	0.02	11.98*
	4.74	4.91	Within	0.034	17	

* Significant at 0.05 level.

Table-II shows that the adjusted post test means values on speed. The obtained f- ratio of 11.98 for adjusted post test mean is greater than the table value 4.45 with df 1 and 17 required for significance at 0.05 level of confidence. The results of the study indicate that there is a significant mean difference exist between the adjusted post test means of small sided games training and control groups on speed. The bar diagram shows the mean values of pre test, post test and adjusted post test on speed of small sided games training group and control group.

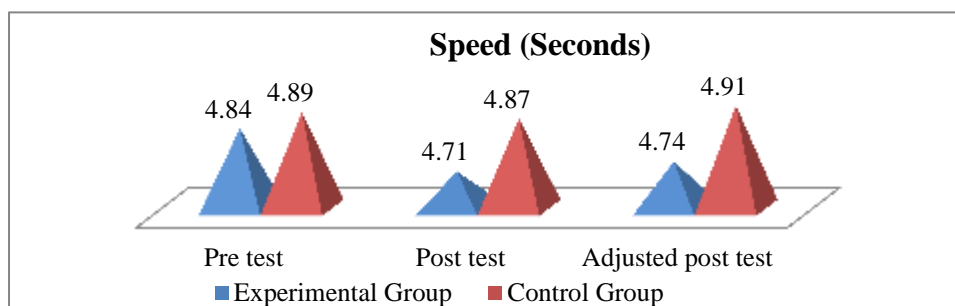


Chart-I: Pre Test, Post Test and Adjusted Post Test Mean Values of Small Sided Games Training and Control Groups on Speed.

2. Agility

Table-III
Computation of ‘t’-Ratio between Pre and Post test Means of Small Sided Games Training Group Control Group on Agility (Seconds)

Group	Test	Mean	Standard Deviation	t-ratio
Small sided games Training	Pre test	12.14	±0.19	15.21*
	Post test	11.74	±0.21	
Control Group	Pre test	12.18	±0.17	0.68
	Post test	12.34	±1.02	

*Significant at 0.05 level.

The table-III shows that the pre-test mean value of small sided games training group and control group are 12.14 and 12.18 respectively and the post test means are 11.74 and 12.34 respectively. The obtained dependent t-ratio values between the pre and post test means of small sided games training group and control group are 9.21 and 1.06 respectively. The table value required for significant difference with df 9 at 0.05 level is 2.26. Since, the obtained ‘t’ ratio value of small sided games training group was greater than the table value, it is understood that small sided games training group had significantly improved the agility. However, the control group has not improved significantly. The ‘obtained t’ value is less than the table value, as they were not subjected to any specific training.

Table-IV
Analysis of Covariance on Agility of Small Sided Games Training Group and Control Group

Adjusted Post Test Means		Source of variance	Sum of squares	df	Mean square	F – ratio
Small sided games Training Group	Control Group	Between	0.74	1	0.74	18.45*
	11.79	12.29	Within	0.68	17	

* Significant at 0.05 level.

Table-IV indicates that the adjusted post test means values on agility. The obtained f- ratio of 18.45 for adjusted post test mean is greater than the table value 4.45 with df 1 and 17 required for significance at 0.05 level of confidence. The results of the study indicate that there is a significant mean difference exist between the adjusted post test means of small sided games training and control groups on agility. The bar diagram shows the mean values of pre test, post test and adjusted post test on agility of small sided games training group and control group.

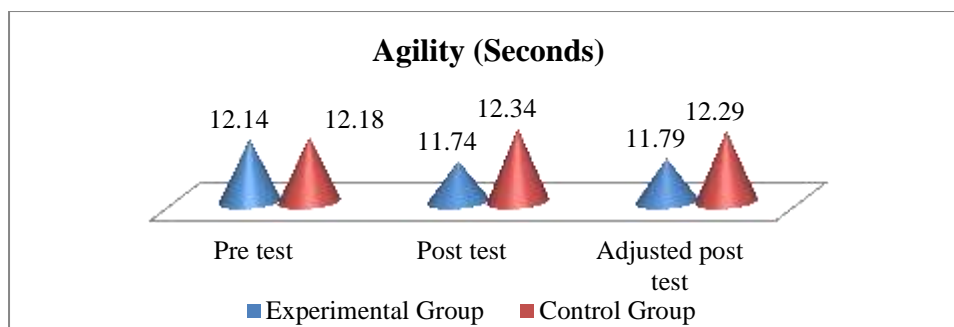


Chart-II: Pre Test, Post Test and Adjusted Post Test mean Values of Small Sided Games Training and Control Groups on Agility.

DISCUSSION ON FINDINGS

The result of the study indicates that there was a significant improvement on speed and agility due to the effect of small sided games training among soccer players when compared to control group. The results of this investigation are also supported by the following studies of Owen (2012), Young & Rogers (2013), and Chaouachi, et al., (2014).

CONCLUSIONS

1. There was significant improvement on speed and agility due to the effect of small sided games training among soccer players.
2. However the control group had not shown any significant improvement on any of the selected variables.

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