Effect of specific soccer drills on dribbling and shooting ability of football players

Jaiveer Singh Rawat and Dr. Narendra Gangwar

Abstract
The objective of the study was to find out the effect of specific soccer drills on dribbling and shooting ability of football players. To attain this aim, a total of 30 male football players (treatment group-15, control-15) from Lakshmi Bai National Institute of Physical Education, Gwalior, Madhya Pradesh with age ranging from 18 to 24 years were randomly selected. All the subjects having been informed about the objective of the study. It was hypothesized that there will be significant difference in mean of dribbling and shooting abilities between treatment group & control group. For the analysis of the effect of soccer drills dribbling and shooting were selected as a performance variables. The subjects performed the training 5 days a week framed in a schedule. After the completion of 6 week of training data on dribbling (for time) and shooting (for distance) collected. To compare the effect independent t-test was employed at 0.05 level of significance. It was found that a significant effect exits in dribbling as well as in shooting ability. Experimental group was found significantly better than the control group in both dribbling and shooting.

Keywords: Specific soccer drills, dribbling, shooting

Introduction
Football in India is believed to have started in the early 1800s. However, the tradition dates back to the 1880 in West Bengal, when the British Army Introduces organized soccer. The game became popular first in Bengal, before it spread to the other parts of the country. Football refers to a sports that involve, to varying degrees of kicking a ball with the foot to score a goal. The most popular of these sports worldwide is association football, more commonly known as just "soccer". Football refers to sports that involve, to varying degrees of kicking a ball with the foot to score a goal. Sports science and modern technology has had a major effect on soccer training over the past 10 years. Many teams have become much more analytical about their players’ work rate in games, and also in training, by introducing tools such as game analysis and heart rate monitors, in order to gain an accurate understanding of the physical demands of players in games. Soccer incorporates periods of high-intensity efforts interspersed with periods of lower-intensity exercise. The physiological demands of soccer require players to be competent in several aspects of fitness, which include aerobic and anaerobic power, muscle strength, flexibility and agility. The benefit of strength and strength training for soccer players is well supported by research. Reilly (1990) showed that the stronger players outlasted the weaker players in terms of a regular place in the team, and had reduced injury risks. He recommends that leg strength in particular is developed, especially in the quadriceps and hamstrings, to help stabilize the knee joint, which is the most frequently injured joint in soccer. Apron (1998), a Hungarian researcher who has been involved in long-term studies of Hungarian professionals, agrees, saying that knee-extension torque has been associated with success in the game and that strong hamstring muscles in relation to quadriceps are crucial to knee injury prevention.

Methodology
Selection of subjects
To attain this aim, a total of 30 male football players (treatment group-15, control-15) from Lakshmi Bai National Institute of Physical Education, Gwalior, Madhya Pradesh with age ranging from 18 to 24 years were randomly selected.
Treatment variables
For the purpose of administering the training program a
training schedule was framed as treatment variable for six
week. Following dependent variables were selected to see the
change caused due to training program.
1. Dribbling ability, Test-Dribbling for time test, Criterion
measure-Time taken (in seconds) to cover the course.
2. Shooting ability, Test-Shooting for distance, Criterion
measure-Distance covered (in meters).

Administration of the test and collection of data
All The subjects were randomly classified in to two groups of
15 each (treatment=15, control=15). The training was given to
treatment group five days a week on Monday to Friday. The
subjects were given various exercises framed in the training
schedule. The data was collected on the selected variable after
the training of six weeks was over.

Dribbling for time
Administration of test: Subjects stand on the starting line
and a finish line is marked 30yards away from it. Five cones
are placed in the 30 yards course. First cone is placed 5 yard
away from the start line and 4 more cones are placed at a
regular interval of 5 yards. On the signal to start, the subject
starts dribbling the ball in a zigzag manner around the cones.
He continues to dribble the ball till the body comes the finish
line.

Scoring: Time taken by the subject to cover the 30 yards
distance is considered as the score of the subject.

Shooting for distance
Administration of test: A ball will be placed on a line and
subject will stand 3or4mts behind the ball, adjusted
individually the subject kicks (High Drive) the ball in air for
the distance.
Scoring: The distance from the point of kick to the point of
first drop of the ball is measured as the score of individual.

Analysis of data and results of the study
The statistical analysis of data on dribbling and shooting
ability of football players has been described below.

Table 1: Descriptive statistics of football players on dribbling ability

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dribbling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>15</td>
<td>5.8807</td>
<td>.40747</td>
<td>.10521</td>
</tr>
<tr>
<td>Control</td>
<td>15</td>
<td>6.3227</td>
<td>.28184</td>
<td>.07277</td>
</tr>
</tbody>
</table>

Table-1 reveals that the means and standard deviation of the
football players on dribbling ability among experimental
group (5.8807) and control group (6.3227).

Table 2: F and t –table for testing the equality of variance and equality of means of experimental and control group

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Dribbling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>.630</td>
<td>.434</td>
</tr>
<tr>
<td>assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances</td>
<td>-3.455</td>
<td>24.901</td>
</tr>
<tr>
<td>not assumed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 reveals that the variance of two groups are equal, the
F value is 0.630 which is insignificant as the P-value is.434
which is more than 0.05. The value of t statistics (3.455) is
significant, as the p-value is 0.002 which is less than 0.05.

Fig 1: Graphical representation on the dribbling ability of football players

Fig 1 shows that the mean of experimental group on dribbling
for time is 5.88 sec and the mean of control group on
dribbling for time is 6.32 sec.
The means and standard deviation of the football players on kicking ability among the experimental group (55.2547) and control group (48.5527) are shown in the table 1.

Table 4: F and t–table for testing the equality of variance and equality of means of experimental and control group

<table>
<thead>
<tr>
<th></th>
<th>Leven’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Kicking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>3.863</td>
<td>26.245</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 2 reveals that the variance of two groups are equal, the F value is 1.767 which is insignificant as the P-value is.195 which is more than 0.05. The value of t statistics (3.863) is significant, as the p-value is 0.001 which is less than 0.05 trained to overcome the weight with explosive movements due to the improved neuro-muscular coordination, increased contractile force generation capacity and ability to summate the forces at various joints during whole body movements.

Recommendations

Based on the conclusions drawn in this study, following recommendations have been made. Similar Study may be undertaken with large number of performance variables such as jumping and strength, similar study can also be conducted on female soccer players, and similar study may be conducted in different demographical region.

References