Effect of twelve weeks training of yogic asanas on selected skill in football

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Abstract
The purpose of the study was experiment for the effect of twelve weeks training of YOGIC ASANAS on selected skill in football. The first objectives of this study the effect of treatment on Running with the ball activity scores when pre-running with the ball activity scores were taken as covariate, second objective of this study the effect of treatment on Kicking Accuracy activity scores when pre-kicking accuracy activity scores were taken as Covariate. And the last third objective of this study the effect of treatment on Juggling activity scores when pre-juggling activity scores were taken as Covariate. The subjects for this study were 60 football male players who participated at interschool level were randomly selected as subjects for this study. They were divided into two groups of 30 subjects each. One group was act as control group named B. The other group name group A. group A was acted as experimental group. Ages of the subjects were ranged from 15-19 years. The pre-tests of selected test items were given to all the subjects of experimental group and control group. After the conduction of pre-test the twelve weeks yogic asana training program for the experimental group subjects were conducted on six days a week. After the completion of 12 (twelve) weeks training program of yogic ASANAS the post data was conducted on all the 60 subjects. Statistical procedure Descriptive Statistic, Mean, Standard Deviation and ANCOVA were applied with TUKEY HSD POST HOC TEST. The level of Significance was set at 0.05. Significant difference was found in 30 meter running with the ball in experimental and control group. Experimental group was found superior then control group significant difference was found in kicking accuracy in experimental and control group. Experimental group was found higher then control group. Significant difference was found in juggling in experimental and control group. Experimental group was found superior then control group. Selected yogic exercises were useful to improve ball control measured by 30 meter running with the ball, kicking efficiency measured by kicking accuracy and balancing ability, agility, reaction ability and sense of touch the ball measured by juggling test. Due to regular yogic exercise the experimental group has shown the significant improvement at pre and posttests.

Keywords: Yogic asanas, football, accuracy activity

Introduction
Football is also known as soccer. The history of football is very old, as similar versions of the game were played in many civilizations. Greeks play the game ‘Sphaira’ which resembles football. There was tough fight to snatch the ball from opponent (by any mean) and reach towards opponent end line. Roman people also play ‘Calcio’ in which they use legs to make the ball to go towards opponent end line. Chinese people also play ‘Tsu chu’ in which blader (leather filled) was kicked by legs. The modern version of game came from England in 1848, when first match played between two local teams. ‘Sheffield Football Club’ developed proper football team in 1863. The first recorded match was played in 1872 between England and Scotland. Federation International de Football Association (FIFA) was formed in 1904 which regulates the rules and development of football. Football become official event in Olympic Games in 1908 from London (after demonstration game in 1900 and 1904 Olympics. The first world cup of football was organized in 1930.Today; football is universally accepted game as its rules are simple. It is very popular game among Europeans, Latin Americans, Asians and African countries. FIFA has more than 200 nations as its members. Many clubs are formed for participating in European League, which has heightened football standards.
In yoga the physical exercise called “asana” are nonviolent and provide a gentle stretching that acts to lubricate the joints, muscles, ligaments, tendons, and other parts of the body. Asanas help to tone the nervous system, improve circulation, release tension and increase flexibility. When performed in slow and relaxed manner, they are designed to develop to more than just the physical body. They also broaden the mental faculties and enhance the spiritual capabilities. Asanas are designed to promote a state of mental and physical well-being or good health, this may be defined as the condition that is experienced when all the organs functions efficiently under the intelligent control of the mind. Asanas have extraordinary capacity to overhaul, rejuvenated, and bring the entire system into a state of balance although they are performed by the physical body. Asanas also have profound effects on the astral body. Asana initially focus on increasing and maintaining flexibility of the spine, toning and rejuvenating the nervous system.

**Objective of the Study**

1. To study the effect of treatment on Running with the ball activity scores when pre-running with the ball activity scores were taken as Covariate.
2. To study the effect of treatment on Kicking Accuracy activity scores when pre-kicking accuracy activity scores were taken as Covariate.
3. To study the effect of treatment on Juggling activity scores when pre-juggling activity scores were taken as Covariate.

**Materials and Methods**

60 football male players who participated at interschool level were randomly selected as subjects for this study. They were divided into two groups of 30 subjects each. One group was act as control group named B. The other group name group A. group A was acted as experimental group. Ages of the subjects were ranged from 15-19years.

**Experimental Design**

The pre tests of selected test items were given to all the subjects of experimental group and control group. After the conduction of pre-test the twelve weeks yogic asanas training program for the experimental group subjects were conducted on six days a week. The duration of practice was 45 minutes per day in morning session according to the feasibility. Control group subjects were not participated in asana training program but they were allowed to do some other activities which will in the curriculum of the school. After the completion of 12 (twelve) weeks training program of yogic asanas the post data was conducted on all the 60 subjects i.e. 30 subjects of experimental group and 30 subjects of control group.

**Statistical Analysis**

Descriptive Statistic, Mean, Standard Deviation and ANCOVA were applied with TUKEY HSD POST HOC TEST. The level of Significance was set at 0.05

**Results, Discussion and Conclusion**

For analyzing the difference within group and between groups the ANCOVA was applied and descriptive statistics also used to explain the characteristics of the variable.

**Table 1: Descriptive Statistics of Experimental Group**

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Pre S.D.</th>
<th>Post S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Mts. Running with the ball</td>
<td>30</td>
<td>5.95</td>
<td>5.44</td>
<td>.69</td>
<td>.51</td>
</tr>
<tr>
<td>Kicking Accuracy</td>
<td>30</td>
<td>5.60</td>
<td>8.50</td>
<td>1.22</td>
<td>.97</td>
</tr>
<tr>
<td>Juggling</td>
<td>30</td>
<td>4.93</td>
<td>20.80</td>
<td>2.31</td>
<td>.99</td>
</tr>
</tbody>
</table>

Table – 1 reveals that for 30 Mts. Running with the ball, pre-test mean was 5.95 and post-test mean was 5.44, whereas for Kicking Accuracy the pre-test mean are 5.60 and post-test mean 8.50 and whereas for juggling the pre mean are 4.93 and post-test mean 20.80. Thus the hypothesis is accepted i.e. there will be significant effect of twelve weeks training program of yogic asana on SAI football skill test.

**Table 2: Descriptive Statistics of Control Group**

<table>
<thead>
<tr>
<th>Test</th>
<th>N</th>
<th>Pre Mean</th>
<th>Post Mean</th>
<th>Pre S.D.</th>
<th>Post S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Mts. Running with the ball</td>
<td>30</td>
<td>5.82</td>
<td>6.22</td>
<td>.71</td>
<td>.48</td>
</tr>
<tr>
<td>Kicking Accuracy</td>
<td>30</td>
<td>5.60</td>
<td>4.66</td>
<td>1.22</td>
<td>1.18</td>
</tr>
<tr>
<td>Juggling</td>
<td>30</td>
<td>5.03</td>
<td>3.63</td>
<td>2.29</td>
<td>2.05</td>
</tr>
</tbody>
</table>

Table – 2 reveals that for 30 Mts. Running with the ball, pre-test mean was 5.82 and post-test mean was 6.22, whereas for Kicking Accuracy the pre-test mean are 5.60 and post-test mean 4.66 and whereas for juggling the pre mean are 5.03 and post-test mean 3.63.

**Table 3: The Analysis of Covariance of Running with Ball Activity (When Pretest Running with the ball activity scores are taken as covariate)**

<table>
<thead>
<tr>
<th>Mean</th>
<th>Exp. Group</th>
<th>Cont. Group</th>
<th>Source Of Variation</th>
<th>Sum Of Squares</th>
<th>Df</th>
<th>Mean Sum Of Squares</th>
<th><del>F</del> Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>5.44</td>
<td>6.22</td>
<td>Between Group</td>
<td>10.40</td>
<td>1</td>
<td>10.40</td>
<td>78.02*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Within Group</td>
<td>7.60</td>
<td>57</td>
<td>.133</td>
<td></td>
</tr>
</tbody>
</table>

*significant at.05 level. Tabulated~F~.05 (1, 57) df = 4.02

Table- 3 clearly shows that ‘~F~ value for post-test mean (78.02*) for experimental and control group were found significant at.05 level. The ‘~F~ value needed for significant at.05 level with df (1,57) was 4.02. This finding indicates that there are significant difference in experimental and control groups and further analysis is required. Since ‘~F~ value (ANCOVA) for post means were found higher significant, Tukey HSD test was applied to find out, which of the differences between the post means were significant. The data pertaining to this is presented in table-6.
Table 4: Tukey Hsd Post Hoc Test For The Experimental And Control Group Of 30 Meters Running With The Ball

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental</th>
<th>Control</th>
<th>M.D.</th>
<th>C.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 MTS. RWB</td>
<td>5.44</td>
<td>6.22</td>
<td>0.78*</td>
<td>0.52</td>
</tr>
</tbody>
</table>

*significance at 0.05 level Tabulated "F".05 (1, 57) df = 4.02

Table - 4 Indicates that the performance of 30 meter running with the ball test was based on time therefore according to the table 4 the experimental group was superior to control group (MD=0.78). It shows that the training of yogic asanas is helpful in improving the performance. It is very clear that the significant difference was found between experimental group and control group because they perform is based on time therefore the experimental group is better than the control group.

Thus the hypothesis is accepted i.e. that there will be significant effect of treatment on Running with the ball activity scores when pre-running with the ball activity scores were taken as Covariate.

Table 5: The Analysis of Covariance of Kicking Accuracy Activity (When Pre kicking accuracy activity scores are taken as covariate)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Exp. Group</th>
<th>Cont. Group</th>
<th>Source Of Variation</th>
<th>Sum Of Squares</th>
<th>Df</th>
<th>Mean Sum Of Squares</th>
<th>‘F’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>8.50</td>
<td>4.66</td>
<td>Between Group</td>
<td>220.41</td>
<td>1</td>
<td>220.41</td>
<td>223.09*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Within Group</td>
<td>56.31</td>
<td>57</td>
<td>.988</td>
<td></td>
</tr>
</tbody>
</table>

*significant at.05 level. Tabulated "F".05 (1, 57) df = 4.02

Table- 5 clearly shows that ‘f’ value for post-test mean (223.09*) for experimental and control group were found significant at.05 level. The ‘f’ value needed for significant at.05 level with df (1, 57) was 4.02. This finding indicates that there are significant difference in experimental and control groups and further analysis is required.

Since ‘f’ value (ANCOVA) for post means were found higher significant, Tukey HSD test was applied to find out, which of the differences between the post means were significant.

Table 6: Tukey Hsd Post Hoc Test For The Experimental And Control Group Of Kicking Accuracy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental</th>
<th>Control</th>
<th>M.D.</th>
<th>C.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kicking Accuracy</td>
<td>8.50</td>
<td>4.66</td>
<td>3.84*</td>
<td>1.42</td>
</tr>
</tbody>
</table>

*significance at 0.05 level Tabulated “F” .05 (1,57) df = 4.02

Table - 6 Indicates that the performance of kicking accuracy test was based on number of score therefore according to the table 6 the experimental group was higher to control group (MD= 3.84). It shows that the training of yogic asanas is helpful in improving the performance. It is very clear that the significant difference was found between experimental group and control group because they perform is based on number of score therefore the experimental group is better than the control group.

Thus the hypothesis is accepted i.e. that there will be significant effect of treatment on Kicking Accuracy activity scores when pre-kicking accuracy activity scores were taken as Covariate.

Table 7: The Analysis of Covariance of Juglling Activity (When Pre Jugging activity scores are taken as covariate)

<table>
<thead>
<tr>
<th>Mean</th>
<th>Exp. Group</th>
<th>Cont. Group</th>
<th>Source Of Variation</th>
<th>Sum Of Squares</th>
<th>Df</th>
<th>Mean Sum Of Squares</th>
<th>‘F’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Test</td>
<td>20.80</td>
<td>3.63</td>
<td>Between Group</td>
<td>4453.50</td>
<td>1</td>
<td>4453.50</td>
<td>300.18*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Within Group</td>
<td>845.65</td>
<td>57</td>
<td>14.83</td>
<td></td>
</tr>
</tbody>
</table>

*significant at.05 level. Tabulated "F".05 (1, 57) df = 4.02

Table- 7 clearly shows that ‘f’ value for post-test mean (300.18*) for experimental and control group were found higher significant at.05 level. The ‘f’ value needed for significant at.05 level with df (1, 57) was 4.02. This finding indicates that there are significant difference in experimental and control groups and further analysis is required.

Since ‘f’ value (ANCOVA) for post means were found higher significant, Tukey HSD test was applied to find out, which of the differences between the post means were significant.
Table 8: Tukey Hsd Post Hoc Test For The Experimental And Control Group Of Juggling

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental</th>
<th>Control</th>
<th>M.D.</th>
<th>C.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juggling</td>
<td>20.80</td>
<td>3.63</td>
<td>17.17*</td>
<td>5.51</td>
</tr>
</tbody>
</table>

*significance at 0.05 level Tabulated ‘F’ 0.05 (1, 57) df = 4.02

Table - 8 Indicates that the performance of juggling test was based on number of touches therefore according to the table 8 the experimental group was superior to control group (MD= 17.17). It shows that the training of yogic asanas is helpful in improving the performance. It is very clear that the significant difference was found between experimental group and control group because they perform is based on number of touches therefore the experimental group is better than the control group. Thus the hypothesis is accepted i.e. that there will be significant effect of treatment on Juggling activity scores when pre-juggling activity scores were taken as Covariate.

Discussion of Findings
The analysis of data reveals that the experimental group trained by yogic ASANAS showed significant gains in the experimental variables i.e., 30 meters running with the ball, kicking accuracy and juggling. Control group is also showed significant difference in kicking accuracy and juggling. No significant difference found in 30 meters running with the ball. The findings may be analysis in the same way that the training program of asana might have affected the performance of control group on 30 meter running with the ball, kicking accuracy and juggling didn’t improve in control group as there may be lack of training for such variables. When between groups analysis was done by analysis of covariance the experimental group was found superior then control group in variable juggling. It clearly indicates that yogic asanas improved the body balance and reaction time.

Conclusion
1. Significant difference was found in 30 meter running with the ball in experimental and control group. Experimental group was found superior then control group.
2. Significant difference was found in kicking accuracy in experimental and control group. Experimental group was found higher then control group.
3. Significant difference was found in juggling in experimental and control group. Experimental group was found superior then control group.
4. Selected yogic exercises were useful to improve ball control measured by 30 meter running with the ball, kicking efficiency measured by kicking accuracy and balancing ability, agility, reaction ability and sense of touch the ball measured by juggling test.
5. Due to regular yogic exercise the experimental group has shown the significant improvement at pre and post tests.

References
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