Effect of beach running on cardiovascular endurance, leg strength and speed among college football players

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Abstract
To achieve the purpose of the study was to effect of Beach running on cardiovascular endurance among the inter collegiate soccer players. To achieve the purpose of the study, their age ranged from 18 to 25 years. Thirty subjects were selected at randomly. The study was conducted on 30 subject from P.B engg college, Rajalasikhi engg College, Dhanalaskshmi engg college. The selected subject were divided in to equal two group consisting of fifteen each no attempt was made to equate. Experimental Group I under the Beach running training group (BR) for three days a week and for a duration of 6 weeks. Group II acted as control Group (CG) the Subject in control group were not engaged in any training programme other than regular work. At the end of the treatment period, as post – test, the subjects belonging to the treatment group namely experimental group I Beach running training group (BR) and Group II control group (CG) were tested on cardiovascular endurance Further the group means gains pre and post – test recorded by two groups during the experimental period of six week to the criterion measures were tested for significance by applying "t" test.

Keywords: Beach running, cardiovascular endurance, speed

Introduction
Soccer is a passing and running game unpredictable and constantly changing pattern demanding an acute awareness of other players and ability to make quick decisions and act upon them without delay. (Belly, 1972) [1]. Soccer practitioners attribute many to become successful players. These include cardiovascular fitness; muscle strength, endurance, flexibility, agility, coordination, skill and tactical knowledge for players possess natural ability in all areas indeed the vast majority of players undergo training programmer in some or all the attributes of improve their ability on the field. (Reilly 1996) [2].

The psychological demands of soccer player indicated to be the exercise intensities at which the many different activities during match play are performed. There are implications not only for fitness assessment and selection of players but also for their training regimes. Since the training and competitive schedules of players comprise their occupational roles there are consequences too for there habitual activities, daily energy requirements and energy expenditures, finally there are repercussion for prevention of injuries as for as possible. (Reilly 1996) Physical fitness may be defined as the ability of body parts to adopt themselves to the environmental demands. Defined Physical Fitness as “the capacity for and capacity must be enough to perform the given work” (Carl E. Willgoose, Evaluation in Health and physical Education) Running on the sand is very difficult than running on the plain surface. The investigator had a thought and vision that beach running would improve soccer players Cardiovascular, Which in turn world help them to play better.

The investigator selected a training that, is beach running for soccer players. To perform running and to play the players should have better physical and physiological fitness. In relation with these the investigator chosen certain selected physical variables for this study… The purpose of the study was to find out the effect of beach running on the development of cardiovascular endurance of soccer players.
Methodology
The purpose of this study was to find out the effect of Beach running in development of cardiovascular endurance of soccer players. To achieve the purpose of this study 30 soccer players from P.B College, Rajalakshmi College Dhanalakshmi College Chennai were selected. The Subjects were in the age group of 18 to 25. The subject were given training programme for three days per week for six weeks.

<table>
<thead>
<tr>
<th>Days</th>
<th>Tuesday</th>
<th>Thursday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 2 week</td>
<td>1½ km Beach running</td>
<td>2 km Beach running</td>
<td>3 km Beach running</td>
</tr>
<tr>
<td>Second 2 week</td>
<td>Beach running + 1½ k. Plus hopping and bounding (Repetition)</td>
<td>Beach running + 2 km plus hopping and bounding (Repetition)</td>
<td>Beach running + 3 km plus hopping and bounding (Repetition)</td>
</tr>
<tr>
<td>Third 2 Week</td>
<td>Beach running + 2km plus hopping and Bounding (Repetition)</td>
<td>Beach running + 2km plus, Bounding High &amp; speed Repetition</td>
<td>Beach running + 3 km plus, Bounding High &amp;speed Repetition</td>
</tr>
</tbody>
</table>

Purpose: To measure cardio respiratory endurance, speed
Materials: Beach sand and Stop watch.
Procedure: Subjects were instructed to run, jog (or) walk about the course. The test continued until they cover 3 km distance

Results and Discussions
The players were given six weeks beach running training. After the experimental period, all the subjects were measured of their speed and cardio respiratory endurance. The differences between initial and final scores were the effect of beach running training.
The obtained means differences were subjected to statistical treatment using „ t „ ratio and the same in respect of speed is presented in Table I

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>MD</th>
<th>SD</th>
<th>„ t „ Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>7.97</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Test</td>
<td>6.18</td>
<td>1.79</td>
<td>1.35</td>
<td>7.24*</td>
</tr>
</tbody>
</table>

Table I: Initial and Final means, Standard Deviation, Means Difference and „ t „ Ratio on speed due to Beach Running on Soccer Players

Conclusion
Within the limitations and delimitations of this study, the following conclusions were drawn.
1. It was concluded that there was a significant improvement on selected Physical variable namely speed to beach running
2. It was concluded that there was a significant improvement on cardiovascular endurance due to beach running among soccer player

Summary
To achieve the purpose of the study was to effect of Beach running on cardiovascular endurance among the inter collegiate soccer players. To achieve the purpose of the study, their age ranged from 18 to 25 years. Thirty subjects were selected at randomly. The study was conducted on 30 subject from P.B engg college, Rajalakshmi engg college, Dhanalakshmi engg college. The selected subject were divided in to equal two group consisting of fifteen each no attempt was made to equate. Experimental Group I under the Beach running training group (BR) for three days a week and for a duration of 6 weeks. Group II acted as control Group (CG) the Subject in control group were not engaged in any training programme other than regular work. At the end of the treatment period, as post – test, the subjects belonging to the treatment group namely experimental group I Beach running training group (BR) and Group II control group (CG) were tested on cardiovascular endurance Further the group means gains pre and post – test recorded by two groups during the experimental period of six week to the criterion measures were tested for significance by applying “t” test.

References