ABSTRACT
The present study was undertaken to analyze the effect of continuous running, fartlek training and interval training on selected motor ability and physiological variables among male football players. The investigator has selected sixty inter collegiate football men players at random, their age ranged from 18-25 years. The subjects chosen for the study were divided into four equal groups and designated as experimental group ‘A’ experimental group ‘B’ experimental group ‘C’ and control group ‘D’. Continuous running were given to group ‘A’ Fartlek training group ‘B’ Interval training given to group ‘C’ and the control group ‘D’ were restricted to participate in any activities. The trainings were given for a period of twelve weeks. The data were collected before and after the training. The obtained data’s were analyzed by Analysis of Covariance (ANCOVA). The level of significant was fixed at 0.05 levels. Where ever the ‘F’ ratio was found significant scheffe’s post test was used for find out the significant differences among the paired mean. The results of the study showed that continuous running, fartlek training and interval training are significantly improved than control group.

I. INTRODUCTION
Continuous training as the name implies, involves continuous activity, without rest intervals. This has varied from high intensity, Continuous activity of moderate duration to low-intensity activity of an extended duration, i.e. long, slow distance, or “LSD” training. LSD training is probably the most widely used form of endurance conditioning for jogger who want to stay in condition for health-related purpose, the athlete who participate in team sports and endurance-trains for general condition, and the athlete who wants to maintain his endurance condition during the off-season. Ajmer Singh et al., (2003). Fartlek training is running with curious intensity according to requirement of the athlete and dictates of the terrain. The athlete will use a terrain which undulates and makes varying demands upon him. (Ex. Hills, Woodland, Ploughed land, sand) like the alternating pace method, anaerobic period provides a sting stimulus for the improvement of VO₂ maximum. In addition, the demands of terrain stimulate strength endurance development and proprioceptive balance adjustment of ankle, knee and hip. (Dick 1980). Interval training is a form of progressive conditioning in which the intensity of the activity, the duration of each bout. The Number of bouts, the time or kind of resting period between bouts, on the order of the bouts is varied Baby (1927). According to Mathews and Fox (1974), Interval training as work or exercise followed by the property of prescribed relief interval.

II. STATEMENT OF THE PROBLEM
The purpose of the study was to find out the effect of Continuous running, Fartlek and Interval training on selected motor abilities, Physiological and skill related performance variables of male football players.

III. METHODOLOGY
The purpose of this study was to find out the influence of effect of continuous running, fartlek training and interval training on selected motor ability and physiological variables namely Body mass index. To achieve the purpose of this study sixty inter collegiate football men players were selected at random from in and around the Guntur district Andhra Pradesh. Their age ranged from 18 to 25 years. The subjects chosen for study was divided into four groups and designated as experimental group A, experimental group B, experimental group C and control group D. Each groups consisted of fifteen players. Continuous running was given to group A, Fartlek training given to group B, Interval training given to group C and control group C was restricted to participate in any of the training programme other than their regular activities. Training was given three days in a week for twelve weeks. The subject were tested on at the Body mass index beginning (Pre-test) and at the end of the experimental period (Post-test). To measure the Body mass index (BMI) formula in percentage respectively because of their simplicity and availability of necessary facilities, instrument and equipment's. 

Body Mass Index (Baumgarther and Jackson 1987) 
Purpose of the Test 
The purpose of the test was to measuring the Body Index (BMI).

Equipments required
Stadiometer, weighing machine.

Procedure
The subjects' standing height were found using stadiometer. Then the subjects' body weights were found from a standard weighing machine. The BMI was calculated from the formula given below

\[
\text{BMI} = \frac{\text{Body Weight (kg)}}{\text{Height (m)}^2}
\]

**Scoring**
The result obtained by solving the formula was the score of the test.

**The Interclass correlation co-efficient values on the selected criterion variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>R’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological</td>
<td>Body mass Index</td>
</tr>
</tbody>
</table>

*Significant at .05 level of confidence

**IV .RESULT AND DISCUSSION**

The analysis of data on **Body mass index** has been examine by ANCOVA for variables separately in order to determine the differences if any among the group at pre and post test when the differences was found to be significant by ANCOVA, the Scheffe’s post hoc test was applied to assess the significant differences between the adjusted mean.

**Table –I: Schefee’s post hoc test for the differences between paired adjusted post test means of body mass index**

<table>
<thead>
<tr>
<th>CRG (pre)</th>
<th>FTG (pre)</th>
<th>ITG (pre)</th>
<th>CG (pre)</th>
<th>MD</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.18</td>
<td>21.04</td>
<td>-</td>
<td>-</td>
<td>0.14</td>
<td>0.25</td>
</tr>
<tr>
<td>21.18</td>
<td>-</td>
<td>21.16</td>
<td>-</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>21.18</td>
<td>-</td>
<td>-</td>
<td>22.73</td>
<td>1.55*</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>21.04</td>
<td>21.16</td>
<td>-</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>21.04</td>
<td>-</td>
<td>22.73</td>
<td>1.69*</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>-</td>
<td>21.16</td>
<td>22.73</td>
<td>1.57*</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level of confidence

The table I Shows that the adjusted post-test means differences of Continuous running group (CRG) and Control group (CG), Fartlek training group (FTG) and Control group (CG) and Interval training group (ITG) and control group (CG) were 1.55, 1.69 and 1.57 respectively. They were greater than the confidence interval value 0.25 at 0.05 level, which indicate that there is a significant differences among the group of Continuous running group (CRG) and Control group (CG), Fartlek training group (FTG) and Control group (CG) and Interval training group (ITG) and control group (CG). The adjusted mean difference of Continuous running group (CRG) and Fartlek training group (FTG), Continuous running group (CRG) and Interval training group (ITG) and Fartlek training group (FTG) and Interval training group (ITG) were 0.14, 0.02 and 0.12 respectively. Hence it shows that they were lesser than the confidence interval value 0.25 at 0.05 levels, which indicate that there is no significant differences exist among the group of Continuous running group (CRG) and Fartlek training group (FTG), Continuous running group (CRG) and Interval training group (ITG) and Fartlek training group (FTG) and Interval training group (ITG). The Comparison of pre, post and adjusted post mean values of body mass index for Continuous running group (CRG), Fartlek training group (FTG), Interval training group (ITG) and control group (CG) on body mass index are graphically presented in figure 12.

**Figure 1:** Bar diagram showing the pre, post and adjusted post test mean values of Continuous running group (CG), Fartlek training group (FTG), Interval training group (ITG) and control group on body mass index.

**V .DISCUSSION ON HYPOTHESIS**

In the second hypothesis it was stated that there would be significant improvement on selected physiological variables. The result of the study shows that due to the effect of continuous training, fartlek training and interval training on selected physiological variables such as body mass index have significantly improved. Hence it was concluded that research hypothesis has been accepted and null hypothesis has been rejected. Hence the research hypothesis has been rejected and null hypothesis has been accepted.

**VI .DISCUSSION AND FINDINGS**

**Body mass index**

The finding of the study on BMI reveal that the experimental groups namely Continuous running, fartlek training and interval training had significantly reduced the body mass index after the training programme. These finding were in par with numerous research literatures that have indicate the existence of **Merrick (2013)** found that long term mild to moderate intensity treadmill walking exercise were effective for reducing subcutaneous fat mass. **Dong shung and Haipung (2011)** suggested that aerobic exercise reduce BMI. **Kaukab and Seemab (2010)** concluded in their study that aerobic exercises significantly reduce of circumference of the waist and hip girth.
CONCLUSIONS

Body mass index was significantly improved by the Continuous running group, Fartlek training group and Interval training group when compared with control group. There is no significant improvement in body mass index between Continuous running group, Fartlek training group and Interval training group.

REFERENCES