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**A COMPARATIVE STUDY OF EFFECTS OF FARTLEK AND**  
**INTERVAL TRAINING ON BOXERS BODY MASS INDEX BMI**  
**(RATIO OF HEIGHT & WEIGHT)**

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**1. INTRODUCTION:**

By experiment it is proved that the various types of training enhance the physical fitness, and physical fitness improves personality, Body Mass Index BMI is one of the effective personality characteristics. Previous research study shows Body Mass Index BMI (Ratio of Height & Weight) enhances the boxer's performance. Though it is not clear which types of training is most useful for the Boxer's Body Mass Index BMI. Hence researcher done work on a comparative study between the fartlek and interval training with respect to its impact on Boxers Body Mass Index BMI.

**1.1. OBJECTIVES OF THE STUDY:**

To evaluate effects of fartlek and interval training on Body Mass Index BMI of Boxers having age group 14 to 17 years. To compare effects of fartlek and interval training on Body Mass Index BMI of boxers having age group 14 to 17 years.

**2. METHOD:**

Researcher randomly selected 14 to 17 years 60 boys boxers having no previous history of fartlek and interval training from Latur city. These boxers are equally divided in three groups, namely fartlek training group, interval training group and controlled group. The selected training was implemented on fartlek and interval groups for six week and the third controlled group without any types of training. Before training all groups gone through pre-test of Body Mass Index BMI (Ratio of Height & Weight). After six week training all groups gone through post test of Body Mass Index BMI (Ratio of Height & Weight). The data was computed and analyzed by ANOVA. Significant level  $t$  is fixed to  $t \geq 0.05$ .

**Statistical Analysis of Collected Data :**

**Table 1. Mean, standard deviation and t-value of body mass index BMI (ratio of height and weight) in the pre-test and post- test of the Fartlek training group.**

Sr. No.	Test	Total Students	Mean	Standard Deviation	Mean difference	t-value
1	Pre-test	30	18.09	1.84	0.6383	0.170
2	Post-test	30	17.45	1.71		

Table No.1 shows  $t = 0.170$  which is  $> 0.05$ .  $t$  is positive and greater than 0.05. Fartlek training improves performance of 14 to 17 years boxers body mass index test. Also it shows there is significant difference between pre-test and post-test after the six week fartlek training. Hence fartlek training significantly improves performance of body mass index amongst 14 to 17 years age group.



**Table 2. Mean, standard deviation and t-value of the body mass index BMI (ratio of height and weight) of the pre-test and post-test of the interval training group**

Sr. No.	Test	Total Students	Mean	Standard Deviation	Mean difference	t-value
1	Pre-test	30	18.44	2.14	0.8793	0.103
2	Post-test	30	17.56	1.95		

Table No. 2 shows  $t = 0.103$  which is  $< 0.05$ .  $t$  is positive and greater than 0.05. Interval training improves performance of 14 to 17 years boxers body mass index test. Also it shows there is significant difference between pre-test and post-test after the six week interval training. Hence interval training significantly improves performance of body mass index amongst 14 to 17 years age group.

**Table 3. Mean, standard deviation and t-value of this test are the body mass index BMI (ratio of height and weight) of pre-test and post-test students**

Sr. No.	Test	Total Students	Mean	Standard Deviation	Mean difference	t-value
1	Pre-test	30	18.4390	2.29	0.0810	0.008
2	Post-test	30	18.3580	2.62		

Table No. 3 Shows  $t = 0.008$  which is  $< 0.05$ .  $t$  is positive but less than 0.05. There is no significant difference between pre-test and post-test of control group.

### 3. RESULTS OF THE STUDY:

- T-value of fartlek training group for body mass index is  $t = 0.170$  which is  $> 0.05$ .  $t$  is positive and greater than 0.05. Fartlek training improves performance of 14 to 17 years boxers body mass index test. Also it shows there is significant difference between pre-test and post-test after the six week fartlek training. Hence fartlek training significantly improves performance of body mass index amongst 14 to 17 years age group.
- T-value of interval training group for body mass index is  $t = 0.103$  which is  $< 0.05$ .  $t$  is positive and greater than 0.05. Interval training improves performance of 14 to 17 years boxers' body mass index test. Also it shows there is significant difference between pre-test and post-test after the six week interval training. Hence interval training significantly improves performance of body mass index amongst 14 to 17 years age group.
- T-value of control group for body mass index is  $t = 0.008$  which is  $< 0.05$ .  $t$  is positive but less than 0.05. There is no significant difference between pre-test and post-test of control group.

### 4. RECOMMENDATION:

Fartlek and interval training are most useful to improve Body Mass Index BMI (Ratio of Height & Weight) test performance amongst 14 to 17 years boy's boxers.

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