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# A COMPARATIVE STUDY TO LOCATE THE DIFFERENCE BETWEEN TIME TRIAL AND PURSUIT RUNNING

\*Dr. Siakot Chatterjee. \*\*Sri, Samir Mondal \*\*\* Dr. Samirranjan Adhikari

**ABASTRACT:** Running on the track requires power, strength, stamina, valor, confidence, sprit and heroism. Track events are charming and attractive. Sprint running ability and training related to it has gone through numerous experimentations. There are several methods related to development of sprinting ability of athletes like downhill running, running with weight jackets, various types of start sprint like standing, crouch and flying. There are also several training methods for enhancement of speed endurance of athletes. Based on knowledge and understanding gathered from practical experiences and sharing of ideas and views with the experts the author with his intuition strived to work out on the concept of pursuit running and its difference with time trial running related to track & field performance and training. In his study the investigator randomly selected 24 students within the age group 24-27 years from the M.P.Ed. Part I and Part II of Department of Physical Education University of Kalyani as the subjects. He conducted separately time trial running and pursuit running and recorded the timings. According to data analysis it appears that the athlete's performance

during pursuit running was significantly better. The author drawn the conclusion that athletes perform better in presence of another competitor which is called co action effect more over this may be a good method for development of speed endurance.

Key words: Time trial running, Pursuit running.

### **Introduction:**

Running on the track requires power, strength, stamina, valor, confidence, sprit and heroism. Track events are charming and attractive. It is well known that the Jamaican sprint bacon won 100 m 200 m and also the relay race gold medals in the London Olympics 2012. Sprint running ability and training related to it has gone through numerous experimentations. There several methods related to development of sprinting ability of athletes like downhill running, running with weight jackets, various types of start sprint like standing, crouch and flying. There are also several training methods for enhancement and of speed endurance of athletes. Based on knowledge and understanding gathered from practical experience and sharing of ideas and views with the supervisor the author with his intuition strived to work out on the concept of pursuit running and its difference with time trial running related to track & field performance and training.

Time trial running: "The time trials are great to do as training even if you don't want to race that particular week," says David Rowe. Of course, if you're doing your time trial alone it's an even less pressurized



<sup>\*</sup> Assistant Professor, Department of Physical Education, University of Kalyani, Kalyani, Nadia, West Bengal, India. E-mail-saikotcahtterjee@gmail.com

<sup>\*\*</sup>Student M.P.Ed. 2<sup>nd</sup> Sem. Department of Physical Education, University of Kalyani, Kalyani, Nadia, West Bengal, India

<sup>\*\*\*</sup> Assistant Professor, Shimurali Sachinandan College of Education, Shimurali, Nadia, West Bengal, India

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environment. If you're someone who suffers from nerves, a solo time trial can help build confidence, allowing you to see your potential when the pressure's off. And if you're not used to running in races, then the organized time trials give you a chance to get used to the feeling of running and competing with other people without shelling out a fee.

Pursuit racing: is where two or more competitors (or teams) are either chasing after each other or chasing after a lead competitor or team. The modern pentathlon is formatted such that the final event, a cross-country run, is essentially a pursuit race. Athlete performance in the prior four events determines the times in which they start the race. The idea is that the first athlete to cross the finish line wins the entire event.

# **Purpose of the study:**

The main purpose of the study was to investigate the difference between Time trial running and Pursuit running. The author was also is a motive of inclusion of such type of performance as professional track and field event based on its acceptance and experts comments and suggestions.

Statement of problem: Based on knowledge and understanding gathered from practical experience and sharing of ideas and views with the supervisor the author with his intuition strived to work out on the concept of pursuit running and its difference with time trial running related to track & field performance and training. The author actually derived the concept of pursuit and time trial running from the events prevalent in the sport cycling. So he selected the problem "A comparative study to locate the

difference between Time trial and pursuit running".

### **Methods and materials:**

In this chapter procedure for selection of subject, criterion measure, design of study, procedure for collection of data equipments and instruments used, statistical procedure incorporated etc. have been presented:

Selection of subjects: 24 students within the age group 24-27 years were randomly selected from the M.P.Ed. Part I and Part II of University of Kalyani Department of Physical Education as the subjects of the present study.

Instruments used: Stop watch- 02, Clapper- 01, Fiber cones-20, Lime dust, Measuring tape and 400 m Standard track.

Single group double trial method has been used as a means for collecting data. In this method on the first day the subjects were asked to run 400 m distance on the track alone i.e. without and partner which is known as time trial running and on the very next day the same subjects were made into pairs with the help of drawing lots and asked to run the same 400 m in pairs. The procedure was that the starter used to give starting from the middle of the track and the time keepers accordingly recorded the time. During every trial or performance the athletes were guided to use requisite uniform and do enough warm up.

Initially descriptive statistics followed by paired sample t test was computed to locate the difference between the means of the two types of running performance.

# **Result and discussion:**

In this phase of the project report the tables of statistical calculations and related discussion have been presented:

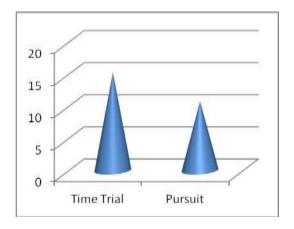


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Table – 1: Paired Samples Statistics of Scores Obtained in Two Types of Sprint

Pair	Mean time in (secs)	N	Std. Deviation
Pursuit	59.5183	24	0.94154
Time Trial	59.9433	24	0.29551

Table No. 1 shows the descriptive statics i.e. Mean and S.D. of the two types of running. It is clear from the table that mean for pursuit running is 59.51 and Time Trial running is 59.94 and the S.D. for those are 0.941 and 0.295 respectively. Since the mean value of pursuit running is lower performance during the Pursuit running is better in comparison to that during the Time Trial running. It is also clear from the diagram that there is a considerable amount of difference between the performance in Time Trial and Pursuit running.



Further paired sample t test was conducted to locate the degree of difference between the means.

Table – 2: Paired Samples Correlations of Scores Obtained in Two Types of Sprint

Pair	N	Correlation	Sig.
Pursuit & Time Trial	24	0.775	0.000



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Table – 3: Paired Samples Test Two Scores Obtained in Two Types of Sprint

	Paired Differences					
Pair	Mean	Std. Dev	Std. Error of Mean	t	df	Sig. (2-tailed)
Pursuit - Time Trial	-0.425	0.737	0.150	-2.827	23	0.010

The table 2(a) and 2(b) also reveals that the difference between the timings of Pursuit and Time Trial running which is significantly different, i.e. the time for pursuit running is significantly lower than the average time of Time Trial running.

Thus the author arrived at the conclusion that performance of the athletes is better during the Pursuit running than that during Time Trial running and according to available literature given in chapter II the author is of the view that the feeling of performing together and enhancement of arousal for chasing his compatriot may be the possible reasons behind this dissimilarity.

# **Summary and Conclusion:**

Performance of the athletes is better during the Pursuit running than that during Time Trial running and according to available literature given in chapter II the author is of the view that the feeling of performing together and enhancement of arousal for chasing his compatriot may be the possible reasons behind this dissimilarity.

## **Recommendations:**

- 1. Pursuit running may be introduced as a track & field event in national and international athletics.
- 2. Pursuit running may be used as training method for development of speed endurance not only for Track & Field athletes but also

for any athletes requiring high levels of speed endurance.



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