

Comparison of Resting Pulse Rate and Breath Holding Time between Tamil Nadu and Other State Labours Working at Fireworks Factories

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#### Abstract

The purpose of the present study was find out the difference in Resting Pulse Rate and Breath Holding Time between Tamil Nadu and other State labours working at fireworks factories. To achieve the purpose of the study, the investigator selected thirty male subjects which consist of fifteen Labours of Tamil Nadu and fifteen labour of other States labours who were working in the firework factories in Sivakasi. Their age ranged between 21 to 35 years. Resting Pulse Rate and Breath Holding Time were selected as variables for the study. They were tested through standard procedures. The "t" ratio was used to compare the collected data. From the analysis of data it was proved that there is significant difference between labours of Tamil Nadu and Other States in Resting Pulse Rate and Breath Holding Time. Further the analysis shows that the labours from Tamil Nadu state were better in Resting Pulse Rate when compared to labours of Other State. But in Breath Holding Time labours from Other State were better when compared to labours of Tamil Nadu State.

Keywords: Resting Pulse Rate, Breath Holding, Labours, Fireworks Factories.

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### Introduction

A consciously coordinated social composed of two or more people, which function on a relatively continuous basis to achieve a common goal or set goal (Robbins, 2007). An organization can be described as rational coordination of the activities of a number of people for the achievement of some common objective through division of labour and hierarchy of authority and accountability (Keith Davis, 1977). Labour is a primary factor of production. The size of a nation's labour force is determined by the size of its adult population, and the extent to which the adults are either working or are prepared to offer their labour for wages. The labour force is a general way to refer to all the people willing and able to work. For on organization, the internal labour force consists of the organizations workers, its employees and the people who have contracts to work at the organization (Raymond A. Noe, John R.Hollenbeck, Barry Gerhart & Patrick M.Wright 2007).

In physiology, one learn how the organs, systems, tissues, cells and molecules within cells work and how their functions are put together to maintain the internal environment. Physiology is the science dealing with the study of human body functions. (Ajmer Singh, 2004) "The number of beats while at rest felt in exactly

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one minute is the resting pulse rate". It was assessed on the lateral side (Radial artery) of the forearm (Strukic.1981). Breath holding time is defined as the duration of time through which one can hold his breath without inhaling and exhaling, (Shaver, 1982)

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# **Statement of the Problem**

The purpose of the study was to find out the differences in Resting Pulse Rate and Breath Holding Time between Tamil Nadu and Other State Labours Working at Fireworks Factories.

### **Hypothesis**

It was hypothesized that there would be significant differences on Resting Pulse Rate and Breath Holding Time between Tamil Nadu and Other State Labours Working at Fireworks Factories in Sivakasi.

## Methodology

To achieve the purpose of the study, the investigator selected thirty male subjects which consist of fifteen Labours of Tamil Nadu and fifteen labours of other States labours who were working in the firework factories in Sivakasi. Their age ranged between 18 to 24 years. Resting Pulse Rate and Breath Holding Time were selected as variable for the study. They were tested with Pulse monitor, and using Nose Clip and Stop watch respectively. The "t" ratio was used to analyze the collected data.

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#### **Results and Discussion**

Table I. Standard deviation and "t" ratio Mean of Resting Pulse Rate and Breath Holding Time

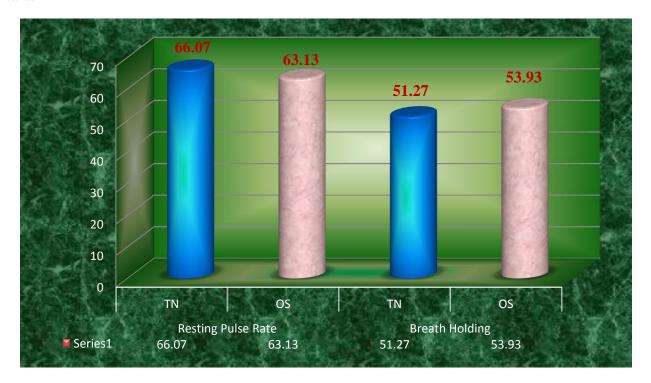
Variable	Group	Mean	SD	SEM	MD	T
Resting Pulse Rate	TN	66.07	3.80	0.98	2.93	2.21*
	OS	63.13	3.46	0.89		
Breath Holding	TN	51.27	1.88	0.49	2.67	3.02*
	OS	53.93	2.86	0.74		

## \*Significant at 0.05 level

From the analysis of data it was proved that there was significant difference between labours of Tamil Nadu and Other States in Resting Pulse Rate and Breath Holding Time as the calculated 't' value 2.21 and 3.02 respectively were greater than the required 't' value of

2.048. Further the analysis shows that the labours from Tamil Nadu were better in Resting Pulse Rate when compared to labours of Other State. But in Breath Holding labours from Other State were better when compared to labours of Tamil Nadu.

Figure I. Bar diagram showing the mean values of Tamil Nadu and Other State Labours Working at Fireworks Factories in Siyakasi



#### Conclusion

- 1. It was concluded that there was a significant difference between labours of Tamil Nadu and other States in the Resting Pulse Rate and Breath Holding Time.
- 2. It was concluded that the labours from Tamil Nadu state were better in Resting Pulse Rate when compared to labours of Other State.
- 3. It was also concluded that in Breath Holding Time labours from other state were better when compared to labours of Tamil Nadu State.

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